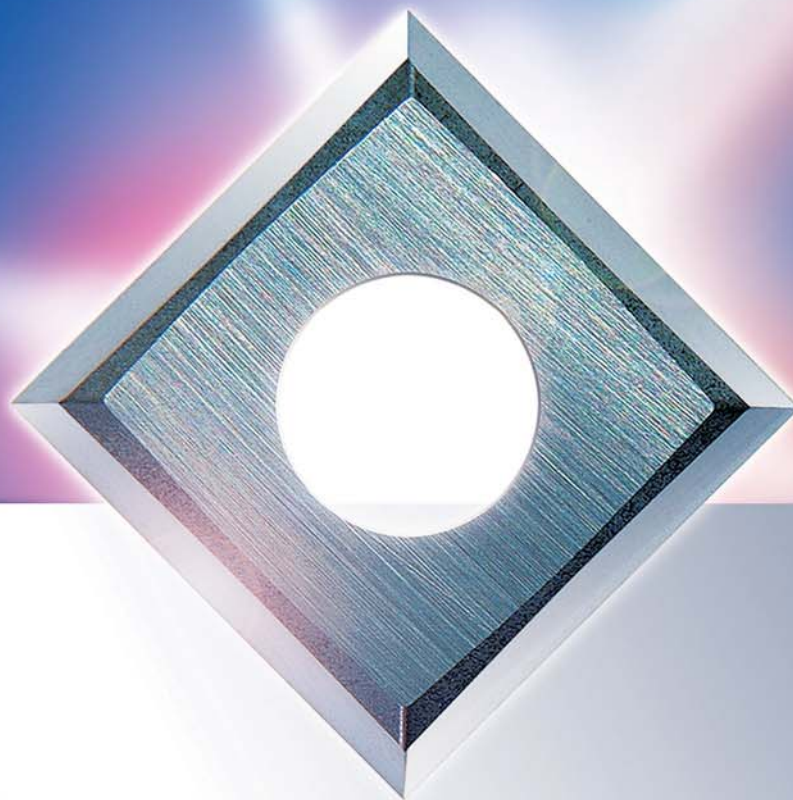


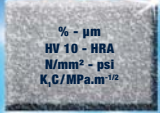
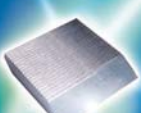


TOOLS CUT BETTER WITH TIGRA



WOODWORKING
HOLZBEARBEITUNG
TRAVAIL DU BOIS
LAVORAZIONE DEL LEGNO
TRABAJO DE MADERA

2014

	EN Technical data DE Technische Daten FR Caractéristiques techniques	IT Dati tecnici ES Datos técnicos
	EN Reversible knives and edge rounding knives DE Wendeschneidplatten und Kantenrunder FR Plaquettes réversibles et couteaux brise-arrête	IT Coltelli reversibili e spigolatori ES Cuchillas reversibles y cuchillas para aristas
	EN Blanks for profiling and radius knives DE Blanketts zum Profilieren und Radienplatten FR Plaquettes à profiler et plaquettes profilées	IT Placchette da profilare e placchette profilate ES Placas para perfilar y perfiladas
	EN Saw tips and strobe blanks DE Sägezähne und Wischerblätter FR Dents de scie et racleurs	IT Dentelli per lame e barrette per rasanti ES Dientes de sierra y rasuradores
	EN Carbide for brazed tools DE Hartmetall für gelötete Fräser FR Plaquettes en carbure à braser	IT Metallo duro per frese saldobrasate ES Metal duro para herramienta soldada
	EN Planer knives DE Hobelmesser FR Couteaux à raboter	IT Coltelli da pialla ES Cuchillas para cepilar
	EN Knives for back corrugated cutterheads DE Messer für rückenverzahnte Messerköpfe FR Couteaux pour outils crantés	IT Coltelli per teste con zigrinatura ES Cuchillas corrugadas
	EN Rods DE Rundstäbe FR Barreaux cylindriques	IT Cilindri ES Barras redondas
	EN TIGRAIloy DE TIGRAIloy FR TIGRAIloy	IT TIGRAIloy ES TIGRAIloy
	EN PCD – Polycrystalline diamond DE PKD – Polykristalliner Diamant FR PCD – Diamant policristallin	IT PCD – Diamante policristallino ES PCD – Diamante policristalino





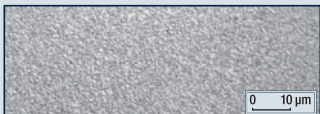
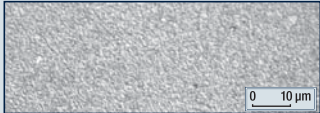
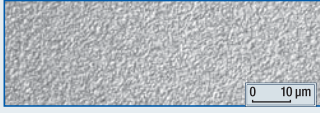
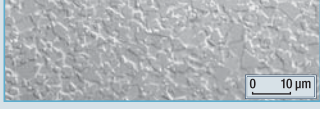
EN Technical data
DE Technische Daten
FR Caractéristiques techniques
IT Dati tecnici
ES Datos técnicos

EN TIGRA carbide grades – Technical Data
DE TIGRA Hartmetallsorten – Technische Daten
FR Nuances carbure TIGRA – Caractéristiques techniques
IT I tipi di metallo duro TIGRA – Dati tecnici
ES Calidades de metal duro TIGRA – Datos técnicos

EN DE FR IT ES	TIGRA grade TIGRA - Sorte Nuance TIGRA Tipo TIGRA Calidad TIGRA	Binder Binder Liant Legante Composicion	Hardness Härte Dureté Durezza Dureza		Bending strength Biegebruchfestigkeit Résistance à la flexion Resistenza flessionale Resistencia a la flexión		Toughness Zähigkeit Ténacité Tenacità Tenacidad
			%	HV 10 (HRA) ± 0,2	(Nmm²)	psi	
	T02UMG ISO: K01 USA: C4 +++	2.0	2550	> 95.5	2300	334.000	5.4
	T02SMG ISO: K01 USA: C4 +++	2.5	2350	95.3	2000	290.000	5.7
	T03SMG ISO: K01 USA: C4 ++	3.5	2100	94.6	2400	348.000	6.4
New!	T03SMG-CR* ISO: K01 USA: C4 +++	3.0	2200	94.9	2300	334.000	6.2
	T03MG-CR* ISO: K01 former: T05CR* USA: C4 ++	3.0	2100	94.6	2500	363.000	6.9
	T03F-CR* ISO: K01 former: T06CR* USA: C4 +	3.0	1950	94.0	2300	334.000	8.2
	T04MG-CR* ISO: K01 former: T08CR* USA: C4 +	4.3	1900	93.6	2350	341.000	8.5
	T04F ISO: K05 USA: C4	4.0	1750	92.8	2350	341.000	8.6
	T05UMG ISO: K01-K10 USA: C3 ++	5.0	2050	94.5	2450	355.000	6.9
	T06MG ISO: K01-K20 USA: C3 ++	6.0	1800	93.3	2700	392.000	8.2
	T06F ISO: K10 USA: C3	6.0	1740	92.7	2350	341.000	9.0
	T06M ISO: K20 USA: C3 -	6.5	1400	90.3	2400	348.000	10.4
	T06MF ISO: K20 USA: C3	6.5	1600	92.0	2500	363.000	9.5
New!	T07MF-CR* ISO: K20-K30 USA: C2-C3	7.5	1580	91.6	2600	377.000	10.1
	T08MF ISO: K30 USA: C2	8.5	1510	90.9	2700	392.000	10.3
	T10MG ISO: K10-K40 USA: C3 +	10.0	1650	92.3	3600	522.000	9.4
	T12SMG USA: C1 ++	12.0	1700	92.7	4000	580.000	9.2
	T12M ISO: > K40 USA: C1	12.0	1250	88.7	2800	406.000	14.0
	T15C ISO: > K40 USA: Nail Cut	15.0	890	84.5	3000	435.000	> 20
	TL15* ISO: K10-K40 USA: C3 +	13.5	1450	90.7	3800	551.000	10.5
	TL20* ISO: K10-K40 USA: C2 +	20.0	1400	90.3	3800	551.000	12.0

* Special binder - Spezialbinder - Liant spécial - Legante speciale - Composición especial
CR = corrosion resistant - korrosionsbeständig - anti-corrosif - inossidabile - anticorrosivo

- EN TIGRA carbide grades – Grain sizes and binder content
 DE TIGRA Hartmetallsorten – Korngrößen und Bindergehalt
 FR Nuances carbure TIGRA – Grosseur du grain et contingent de liant
 IT I tipi di metallo duro TIGRA – Grossezza del grano e quota di legante
 ES Calidades de metal duro TIGRA – Tamaño del grano y cuota de la composición

EN DE FR IT ES	Shortform Abkürzung Abréviation Abbreviazione Abreviatura	Explanation Erklärung Explication Spiegazione Spiegazione	Grain size Korngröße Grosseur du grain Grossezza del grano Tamaño del grano (μm)	
	NG	Nano Grain	0.2	
	UMG	Ultra Micro Grain	0.2 - 0.5	
	SMG	Sub Micro Grain	0.5 - 0.7	
	MG	Micro Grain	0.7 - 1.0	
	F	Fine Grain	1.0 - 1.4	
	MF	Medium Fine Grain	1.4 - 2.5	
	M	Medium Grain	2.5 - 4.0	
	C	Coarse Grain	4.0 - 10.0	
	EC	Extra Coarse	> 10	

- EN Detailed application recommendations can be found in the individual chapters.
 DE Detaillierte Anwendungsempfehlungen finden Sie in den einzelnen Kapiteln.
 FR Pour les recommandations d'application détaillées, veuillez voir aux chapitres suivants.
 IT Suggestimenti di impiego dettagliati si trovano nei singoli capitoli.
 ES Recomendaciones de aplicación detalladas, se encuentran en los capítulos individuales.

- EN TIGRA PCD grades – Grain sizes and binder
 DE TIGRA PKD-Sorten – Korngrößen und Binder
 FR Nuances PCD TIGRA – Grosseur du grain et liant
 IT I tipi di PCD TIGRA – Grossezza del grano e legante
 ES Calidades de PCD TIGRA – Tamaño del grano y composición

EN DE FR IT ES	Shortform Abkürzung Abréviation Abbreviazione Abreviatura	Binder Binder Liant Legante Composición	Diamond content Diamantgehalt Teneur en diamond Contenuti diamante Contenido de diamante	Grain size Korngröße Grosseur du grain Grossezza del grano Tamaño del grano	
				(µm)	
	ES	Standard	Standard	0.5 - 0.8	
	FS	Standard	Standard	2 - 4	
	FX	Special	Reduced	2 - 4	
	MS	Standard	Standard	8 - 10	
	MX	Special	Reduced	8 - 10	
	MU	Ultrahard	Very high	2 - 4 + 8 - 10	
	CS	Standard	Standard	20 - 35	
	CX	Special	Reduced	20 - 35	
	CU	Ultrahard	Very high	2 - 4 + 20 - 35	

- EN Detailed application recommendations can be found in the individual chapters.
 DE Detaillierte Anwendungsempfehlungen finden Sie in den einzelnen Kapiteln.
 FR Pour les recommandations d'application détaillées, veuillez voir aux chapitres suivants.
 IT Suggestimenti di impiego dettagliati si trovano nei singoli capitoli.
 ES Recomendaciones de aplicación detalladas, se encuentran en los capítulos individuales.

EN	TIGRA HSS materials – Technical Data
DE	TIGRA HSS-Materialien – Technische Daten
FR	Matériaux HSS TIGRA – Caractéristiques techniques
IT	I materiali di HSS TIGRA – Dati tecnici
ES	Materiales de HSS TIGRA – Datos técnicos

EN DE FR IT ES	Name Name Nom Nome Nombre	Main usage Hauptverwendung Usage principal Main uso Uso principal
	HSS	EN Universal grade for soft and hardwood DE Universalsorte für Weich- und Hartholz FR Nuance universelle pour des bois tendres et durs IT Qualità universale per legni teneri e duri ES Calidad universal para maderas duras y blandas
	HSS 18%	EN Abrasive and very hard woods DE Abrasive und sehr harte Hölzer FR Bois abrasifs et très durs IT Legni abrasivi e molto duri ES Maderas abrasivas y muy duras
	HSS M42	EN Abrasive applications DE Abrasive Anwendungen FR Applications abrasives IT Applicazioni abrasive ES Aplicaciones para materiales apasivos
	High Performance Steel	EN Softwood, low price demands DE Weichholz, niedriger Preis FR Bois tendre, prix bas IT Legni teneri, prezzo ridotto ES Madera blanda, precio economico
	T.C.T. (Tungsten carbide tipped)	EN Higher lifetime demands DE Höhere Standzeitansprüche FR Applications de durabilité IT Per richiesta di alta durata ES Para aplicaciones de durabilidad
	Solid carbide	EN Highest lifetime demands DE Höchste Standzeitansprüche FR Applications de durabilité maximisé IT Per richiesta di massima durata ES Para aplicaciones de maxima durabilidad
	Matrix coating technology	EN Very long lifetime with multiple resharpening DE Sehr lange Standwege bei bester Nachschärfbarkeit FR Très longue durée de vie et nombreux affûtages IT Lunghissima durata e buonissima riaffilatura ES Vida útil muy prolongada y varios afilados

EN	Detailed application recommendations can be found in the individual chapters.
DE	Detaillierte Anwendungsempfehlungen finden Sie in den einzelnen Kapiteln.
FR	Pour les recommandations d'application détaillées, veuillez voir aux chapitres suivants.
IT	Suggerimenti di impiego dettagliati si trovano nei singoli capitoli.
ES	Recomendaciones de aplicación detalladas, se encuentran en los capítulos individuales.



- EN TIGRA coatings – Technical Data
 DE TIGRA Beschichtungen – Technische Daten
 FR Les revêtements TIGRA – Caractéristiques techniques
 IT I rivestimenti TIGRA – Dati tecnici
 ES Los revestimientos TIGRA – Datos técnicos



EN Matrix - coating technology:

Unique coating for maximum lifetime requirements

- Tool life is on average 3-5 times longer
- Coating penetrates into the material
- Still significantly longer tool life after resharpener
- Smoother surface

DE Matrix - coating technology:

Einzigartige Beschichtung für höchste Standwegansprüche

- Durchschnittlich 3-5-facher Standweg
- Beschichtung dringt in das Material ein
- Auch nach dem Nachschärfen noch deutlich längere Standwege
- Glattere Oberfläche

FR Matrix - coating technology:

Un revêtement unique pour une tenue d'outil inégalée

- En moyenne la tenue d'outil est multipliée par 3-5
- Le revêtement pénètre le matériau
- Des tenues d'outil nettement plus longues, même après le réaffûtage
- Surface plus lisse

IT Matrix - coating technology:

Rivestimento unico per esigenze di massima durata

- Una durata media 3-5 volte più lunga
- Il rivestimento penetra nel materiale
- Anche dopo la riaffilatura la durata è considerevolmente più lunga
- Superficie più liscia

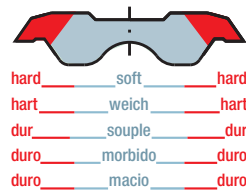
ES Matrix - coating technology:

Recubrimiento exclusivo para un máximo rendimiento

- Ratio de vida de la herramienta 3-5 veces
- Recubrimiento se adhiere al material
- Duración de vida significativamente superior después de reafileado
- Superficie más lisa



- EN TIGRA HSS Black Oxide – Technical Data
 DE TIGRA HSS-Black Oxide – Technische Daten
 FR HSS TIGRA Black Oxide – Caractéristiques techniques
 IT HSS TIGRA Black Oxide – Dati tecnici
 ES HSS TIGRA Black Oxide – Datos técnicos



EN Optimized distribution of hardness

The unique manufacturing process maneuvers hardness to where it belongs: the cutting edge. The core of the knife remains soft to help protect against breakage and to also increase the ease of an eventual straightening.

Polished cutting edge

For an extra-aggressive cut in the wood, the cutting edge has a second, partial polish grind.

Black Oxide Surface

The thin black surface layer of ferric oxide, only nanometers thick, runs across the top and bottom. This improves corrosion Résistance and prevents early rusting.

DE Optimierte Härteverteilung

Durch das spezielle Herstellungsverfahren wird die Härte genau dort hin gebracht, wo sie auch benötigt wird: in die Schneidkante. Der Kern des Messers bleibt weich und flexibel, was Bruch vorbeugt und das eventuelle Richten nach dem Nachschärfen vereinfacht.

Polierte Schneidkante

Für einen besonders giftigen Eingriff im Holz und eine sehr gute Holzoberfläche hat die Schneidkante einen zweiten, polierten Schliff.

Black Oxide Surface

Die wenige Nanometer starke, schwarze Schicht aus Eisenoxyd auf Ober- und Unterseite macht das Messer beständiger gegen Korrosion und verhindert frühzeitiges Rosten.

FR Répartition optimale de la dureté

Grâce au procédé de fabrication spécial, la dureté est là où besoin en est: au niveau du tranchant. Le noyau du couteau reste souple et flexible, ce qui prévient la rupture et simplifie l'ajustement après le réaffûtage.

Tranchant poli

Le tranchant bénéficie d'un deuxième polissage, pour une coupe particulièrement nette et une très bonne surface de bois.

Surface Black Oxide

La couche noire en oxyde de fer, d'une épaisseur de quelques nanomètres sur le dessus et le dessous rend le couteau plus résistant contre la corrosion et la rouille anticipée.

IT Migliorata distribuzione della durezza

Grazie ad un particolare metodo di produzione, la durezza del coltello è là dove è maggiormente richiesta, sul tagliente. La parte centrale del coltello rimane più morbida e flessibile, si evitano così rotture e la riaffilatura è più semplice.

Tagliente parzialmente lappato

Per un taglio su legno più preciso e affilato, il tagliente è parzialmente lappato.

Superficie „Black Oxide“

La sottile superficie di ossido di ferro nera, rende il coltello più resistente alla corrosione e alla ruggine.

ES Distribución optimizada de la Dureza

El exclusivo proceso permite distribuir la dureza en el filo de corte. El nucleo de la cuchilla permanece tenaz ayudando a evitar la rotura así como permitiendo la planitud del cuerpo de la placa.

Lapeado del flanco de corte

Para condiciones severas de corte en la madera, el filo de corte dispone de un doble acabado lapeado.

Recubrimiento superficial-„Black Oxide“

La superficie exterior permanece recubierta de oxido ferrico con espesores de nanómetros, mejorando la resistencia a la corrosion.



- EN TIGRAIloy – Technical Data
 DE TIGRAIloy – Technische Daten
 FR TIGRAIloy – Caractéristiques techniques
 IT TIGRAIloy – Dati tecnici
 ES TIGRAIloy – Datos técnicos

EN TIGRAIloy, a cutting material, consisting of a mixture of hard chromium and tungsten carbide that are embedded in a tough cobalt matrix. This results in an ideal combination of high hardness and high toughness. Therefore TIGRAIloy is an ideal cutting material for many kinds of solid wood. In addition to the good wear Résistance, there is a high heat Résistance. Very good brazeability and the opportunity to grind extremely sharp cutting edges.

Characteristics:

Hardness: 60 HRC - Heat Résistance: up to 800°C / 1500°F - Highly corrosion resistant - Extremely shock proof

DE TIGRAIloy besteht aus harten Chrom- und Wolframkarbiden, die in einer zähen Kobaltmatrix eingelagert sind. Daraus entsteht eine ideale Kombination von hoher Härte und besonders guter Zähigkeit. TIGRAIloy ist damit ein idealer Schneidstoff für die Bearbeitung vieler Massivhölzer. Zu einer hohen Verschleißfestigkeit kommt eine hohe Hitzebeständigkeit, eine sehr gute Lötbarkeit und die Möglichkeit, mit sehr scharfen Schneidkanten zu arbeiten.

Eigenschaften:

Härte: 60 HRC - Hitzebeständigkeit: bis 800°C - Sehr korrosionsbeständig - Hohe Bruchfestigkeit

FR TIGRAIloy est constitué de carbures de chrome et de tungstène durs qui sont logés dans une matrice de cobalt résistante. TIGRAIloy est ainsi un matériau de coupe idéal pour l'usinage de nombreux bois massifs. Outre une grande résistance à l'usure, il présente également une forte résistance à l'échauffement, une excellente brasabilité et la possibilité de travailler avec des arêtes de coupe très vives.

Propriétés:

Dureté: 60 HRC - Résistance à la chaleur: jusqu'à 800°C - Très résistant à la corrosion - Grande résistance à la rupture

IT TIGRAIloy è composta da carburo duro di cromo e tungsteno, incastonati in una matrice di cobalto tenace. Una combinazione ideale di durezza e di resistenza. TIGRAIloy è oltretutto materiale ideale al taglio di molti tipi particolari di legno. La buona resistenza all'usura nonché la grande resistenza termica e una buona saldobrasatura permettono l'uso di taglienti molto affilati.

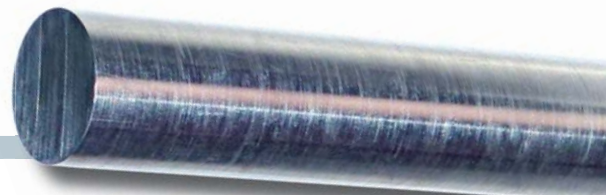
Caratteristiche:

Durezza: 60 HRC - Resistenza termica: fino a 800°C - Alta resistenza alla corrosione - Alta resistenza flessionale

ES TIGRAIloy se compone de carburos duros de cromo y volframio que están depositados en una matriz de cobalto resistente. Así se consigue una combinación ideal de alta dureza y de resistencia especialmente buena. Por lo tanto, TIGRAIloy es un material de corte ideal para el labrado de muchas maderas macizas. A esa alta resistencia de desgaste se añade una alta resistencia refractaria, una buena soldadura y la posibilidad de trabajar con aristas cortantes muy vivas.

Propiedades:

Dureza: 60 HRC - Resistencia a calor hasta 800°C - Alta resistencia a la corrosión - Alte resistencia a la rotura



New!

1

- EN TIGRAMet - Heavy alloy tool body blanks – Technical Data
 DE TIGRAMet - Grundkörperrohlinge aus Schwermetall – Technische Daten
 FR TIGRAMet - Ébauches en métal lourd - Caractéristiques techniques
 IT TIGRAMet - Corpo utensile grezzo in metallo pesante - Dati tecnici
 ES TIGRAMet - Cuerpos de metal pesado - Datos técnicos

EN TIGRAMet is a high density tungsten heavy alloy which is ideally suited for high stiffness tooling. TIGRA supplies pre-peeled heavy alloy rods with a high Young's modulus (elasticity). This also leads to a high absorption of vibration. Despite the high density (17g/cm³), it is still easy to machine. TIGRAMet has 40% less tendency to bend when compared to steel tool bodies. TIGRAMet is available from stock in many dimensions.

Your benefits:

- high stiffness
- less vibrations
- cut-to-size available
- large stock
- favorable pricing
- special dimensions upon request

DE TIGRAMet ist ein hochdichtes Schwermetall auf Wolframbasis, welches ideal für Werkzeuge mit großen Steifigkeitsansprüchen geeignet ist. TIGRA liefert vorgeschälte Schwermetall-Rundstäbe mit hohem Elastizitätsmodul. Dies führt zu stark gedämpften Schwingungen. Trotz der Dichte von 17 g/cm³ lässt sich TIGRAMet noch gut zerspanen und reduziert die Durchbiegung im Vergleich zu Stahlgrundkörpern um 40%. TIGRAMet ist in vielen Abmessungen ab Lager verfügbar.

Ihre Vorteile:

- hohe Steifigkeit
- geringe Vibrationen
- Fixlängen lieferbar
- großes Lager
- günstige Preise
- Sonderabmessungen auf Anfrage

FR TIGRAMet est un métal lourd haute densité à base de tungstène, qui convient idéalement aux outils à exigences élevées en terme de rigidité. TIGRA fournit des bâtonnets ronds pré-brasés en métal lourd à module d'élasticité élevé. Cela conduit à des oscillations fortement amorties. Malgré une densité égale à 17 g/cm³, TIGRAMet reste encore facile à usiner et réduit la flexion de 40 % comparativement à des corps de base en acier. TIGRAMet est disponible sur stock en différentes dimensions.

Vos avantages:

- une rigidité élevée
- des vibrations réduites
- des longueurs spécifiques sur demande
- un large stock
- des prix bas
- des dimensions spéciales disponibles sur demande

IT TIGRAMet è un metallo pesante ad alta densità a base di tungsteno, ideale per utensili con esigenze di rigidità. TIGRA fornisce cilindri pelati in metallo pesante con elevato modulo di elasticità. Ciò permette di avere oscillazioni estremamente attenuate. Nonostante la densità di 17 g/cm³, TIGRAMet è facilmente lavorabile e riduce la flessione del 40% rispetto alle basi in acciaio. TIGRAMet è disponibile franco magazzino in molte misure.

I vostri vantaggi:

- elevata rigidità
- vibrazioni minime
- disponibile in lunghezze fisse
- ampia disponibilità
- prezzi vantaggiosi
- misure particolari su richiesta

ES TIGRAMet es una aleación de tungsteno pesado de alta densidad, especialmente adecuada para herramientas de alta rigidez. TIGRA proporciona barras de aleación pesada ya peladas con módulo de Young (módulo elástico) con las que se consigue una gran absorción de la vibración. A pesar de su gran densidad (17g/cm³), TIGRAMet es fácil de mecanizar y su tendencia a la flexión es un 40% inferior a la de las herramientas de acero. TIGRAMet está disponible en stock y se ofrece en muchos tamaños.

Sus beneficios:

- gran rigidez
- mínimas vibraciones
- corte a medida disponible
- gran stock
- precios competitivos
- tamaños especiales bajo pedido



EN TIGRA – Quality Leader worldwide

TIGRA's self-designed, highly automated production machines guarantee 100% optically controlled precision products that are delivered to the customer at an optimal price-performance ratio in a short time. In close co-operation with the tool manufacturers, TIGRA develops optimally coordinated cutting geometries and grades resulting in long tool life and significant cost reductions. No matter if it's about standard or special products: TIGRA is the competent partner for versatile solutions of carbide and ultra-hard cutting materials for a variety of woodworking tools. In order to always meet the application requirements of the customer and to optimize the tool efficiency in the best possible way, TIGRA is placing special emphasis on innovation and continuous improvement in the production of the various cutting inserts.

DE TIGRA – Weltweiter Qualitätsführer

TIGRA's selbst konstruierte, hoch automatisierte Fertigungsmaschinen garantieren 100% optisch kontrollierte Präzisionsprodukte, die zu einem optimalen Preis-Leistungsverhältnis in kurzer Zeit dem Kunden geliefert werden. In enger Zusammenarbeit mit den Werkzeugherstellern entwickelt TIGRA optimal abgestimmte Schneidgeometrien und -güten, die lange Werkzeugstandwege und erhebliche Kostenreduzierungen mit sich bringen. Ob Standard- oder Sonderartikel: TIGRA ist der kompetente Partner für vielseitige Lösungen aus Hartmetall und ultraharten Schneidstoffen für die verschiedensten Werkzeuge der Holzbearbeitung. Um den Anwendungsbedürfnissen der Kunden stets gerecht zu werden und die Werkzeugeffizienz möglichst zu optimieren, werden Innovation und permanente Verbesserung bei der Fertigung der unterschiedlichsten Schneideinsätze im Hause TIGRA groß geschrieben.

FR TIGRA - leader mondial en terme de qualité

La société TIGRA conçoit elle-même ses machines de production hautement automatisées. Celles-ci sont le gage de produits de précision faisant l'objet de contrôles visuels 100 %, pour un rapport qualité-prix optimal et un délai de livraison court. En étroite collaboration avec des fabricants d'outils, TIGRA développe des géométries et des qualités de coupe parfaitement ajustées, qui garantissent la longue durée de vie des outils et des réductions considérables des coûts. Produits standards ou spéciaux: TIGRA est votre partenaire compétent pour des solutions de coupe polyvalentes en carbure (métal dur) et en matériaux de coupe ultra-durs pour les outils les plus divers dédiés au travail du bois. Afin de répondre aux exigences d'application du client et optimiser le plus possible l'efficacité de l'outil, TIGRA place au premier plan l'innovation et l'amélioration continue lors de la fabrication des plaquettes de coupe les plus diverses.



IT TIGRA – Leader mondiale della qualità

Le apparecchiature di produzione costruite dall'azienda stessa ed altamente automatizzate, garantiscono prodotti di precisione controllati al 100% a livello ottico, consegnati al cliente con un ottimo rapporto qualità prezzo e in breve tempo. Collaborando a stretto contatto con i produttori di utensili, TIGRA sviluppa geometrie di taglio e qualità di metallo duro perfettamente sintonizzate l'uno all'altro permettendo agli utensili di durare nel tempo e riducendo notevolmente i costi. Articoli standard o particolari, non c'è differenza: TIGRA è il partner competente per molteplici soluzioni in metallo duro e per materiali da taglio ultraduri per i diversi utensili per la lavorazione del legno. Per soddisfare costantemente le esigenze di applicazione dei clienti e ottimizzare quanto più possibile l'efficienza degli utensili, l'innovazione e il miglioramento nella produzione della vasta gamma di placchette assumono un ruolo di primaria importanza nell'azienda TIGRA.

ES TIGRA - Líder mundial de calidad

Máquinas TIGRA de diseño propio, altamente automatizadas, garantizan al cliente productos de absoluta precisión controlados ópticamente, una buena relación precio-rendimiento y entregas extraordinariamente rápidas. En estrecha cooperación con los fabricantes de herramientas, TIGRA desarrolla geometrías y calidades de corte que destacan por su prolongada vida útil y que reducen los costes significativamente. TIGRA es el socio competente para las más versátiles soluciones de útiles cortantes en material duro y ultraduro para todo tipo de aplicaciones en el mecanizado de la madera. Para satisfacer las necesidades del cliente y optimizar la eficiencia de las herramientas, TIGRA apuesta por la innovación tecnológica y la mejora continua de sus útiles de corte.





EN TIGRA – Short portrait of a forward-looking company

TIGRA is a leading supplier of cutting inserts made of tungsten carbide, HSS, TIGRAloy, PCD and PCBN for wood and metal working tools as well as for tungsten carbide special knives and wear parts. Thanks to the highly automated production and an internationally structured distribution network TIGRA today offers the most extensive product range for woodworking in the global market. No matter if it is chip-board, MDF / HDF or all types of natural woods, TIGRA products made of specially developed carbide grades as well as of other materials such as HSS, PCD, TIGRAloy ensure optimum tool life, break Résistance and best cutting results.

DE TIGRA – Kurzporträt eines zukunftsorientierten Unternehmens

TIGRA ist ein führender Lieferant von Schneideinsätzen aus Hartmetall, HSS, TIGRAloy, PKD und PcBN für Holz- und Metallbearbeitungswerkzeuge sowie für Hartmetall-Spezialmesser und -Verschleißteile. Dank der hochautomatisierten Fertigung und einem international strukturierten Vertriebsnetz bietet TIGRA heute das umfangreichste Produktprogramm für die Holzbearbeitung am Weltmarkt an. Ob Spanplatte, MDF/HDF oder alle Arten von natürlichen Hölzern, TIGRAs Produkte aus speziell entwickelten Hartmetallsorten sowie aus weiteren Werkstoffen wie HSS, PKD, TIGRAloy sorgen für optimale Standwege, Bruchsicherheit und beste Schnittergebnisse.

FR TIGRA – Court portrait d'une entreprise tournée vers l'avenir

TIGRA est un fournisseur leader de plaquettes de coupe en métal dur, HSS, TIGRAloy, PCD et PcBN destinées aux outils de travail du bois et du métal et aux couteaux spéciaux et pièces d'usure en carbure. Grâce à une production automatisée high-tech et un réseau de vente présent à l'international, TIGRA propose aujourd'hui sur le marché mondial une vaste gamme de produits dédiée au travail du bois. Pour les panneaux à particules, MDF/HDF ou d'autres essences de bois naturels, TIGRA développe des produits de coupe en carbure spécial ou autres matériaux tels que le HSS, PCD, TIGRAloy qui assurent une excellente tenue d'outil, une résistance élevée à la rupture et des résultats de coupe parfaits.



IT TIGRA - Breve ritratto di un'azienda orientata al futuro

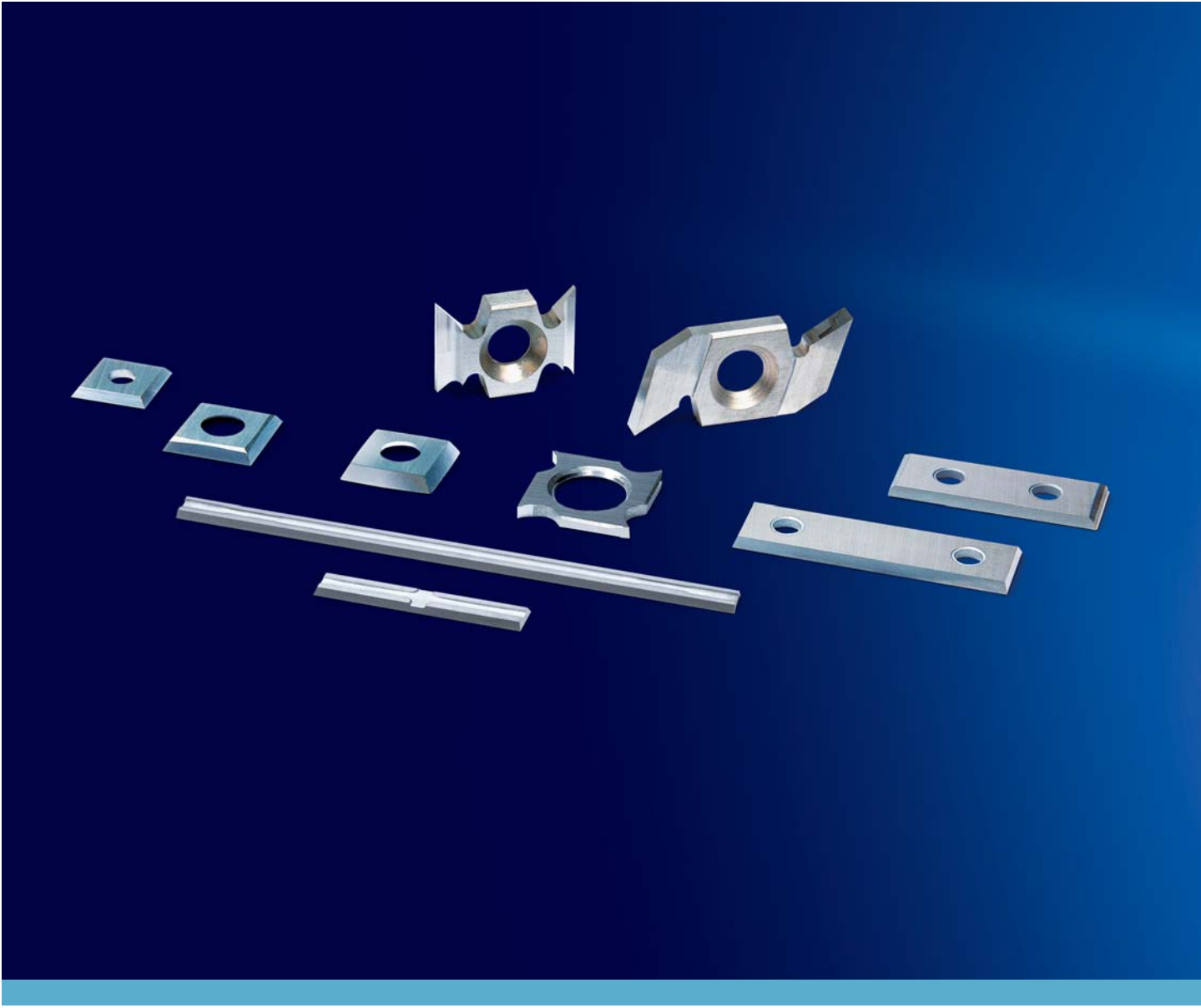
TIGRA è tra i fornitori leader di placchette in metallo duro, HSS, TIGRAIloy, PCD e PcBN per utensili per la lavorazione del legno e del metallo, per coltelli speciali in metallo duro e per il settore usura. Grazie all'elevata automazione nella produzione e ad una rete di vendita internazionale, TIGRA offre oggi la gamma più completa sul mercato mondiale di prodotti per la lavorazione del legno. Sia che si tratti di truciolare, MDF/HDF o di tutte le varietà di legni naturali, i prodotti TIGRA in diversi tipi di metallo duro sviluppati per le specifiche produttive o in altri materiali come HSS, PCD, TIGRAIloy, garantiscono longevità ottimale, resistenza alla rottura e le migliori performance di taglio.

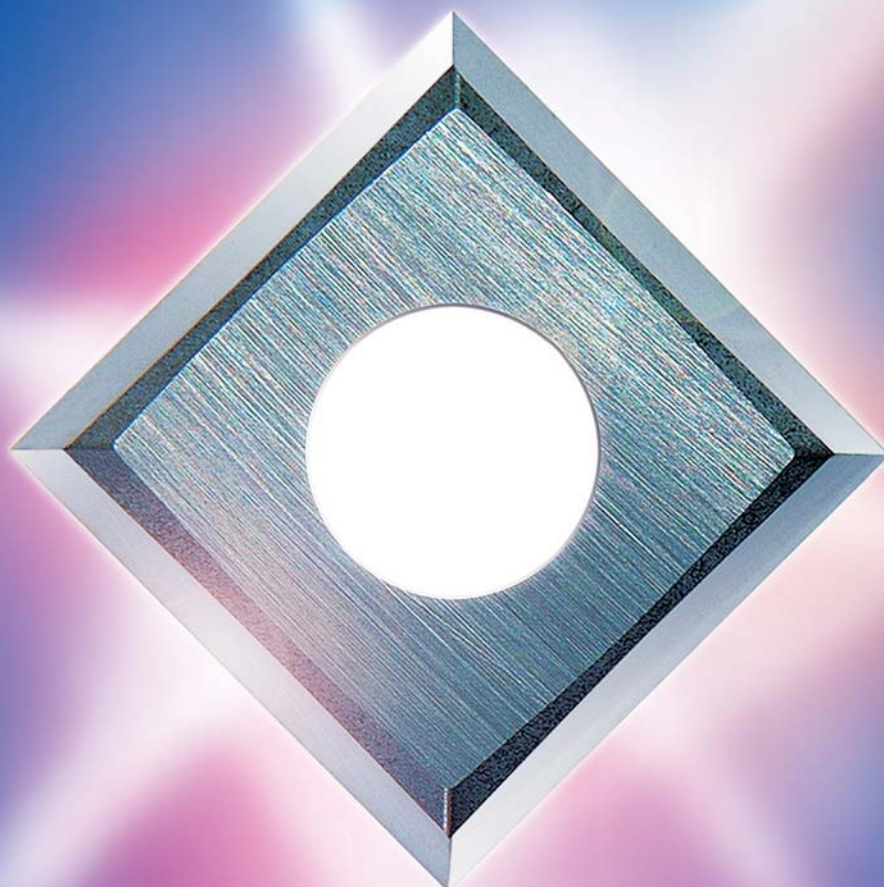
ES TIGRA – Breve retrato de una empresa con visión de futuro

TIGRA es un proveedor líder de útiles cortantes en metal duro, HSS, TIGRAIloy, PCD y PcBN para el mecanizado del metal y la madera, así como para cuchillas especiales y piezas de desgaste de metal duro. Gracias a la producción altamente automatizada y a una red de distribución internacional, TIGRA ofrece en la actualidad el programa de productos para el mecanizado de la madera más amplio del mercado. Los productos TIGRA, tanto de metal duro especialmente desarrollados como de HSS, PCD y TIGRAIloy aseguran una prolongada vida útil de la herramienta, una excelente resistencia a la rotura y óptimos resultados de corte, sea con aglomerados, como con MDF/HDF o cualquier tipo de madera natural.



TOOLS CUT BETTER WITH TIGRA



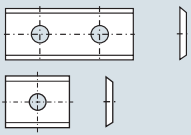
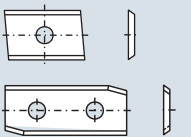
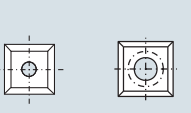
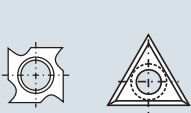
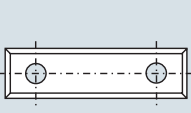
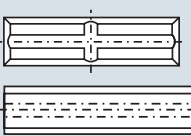
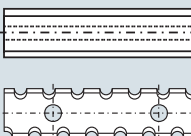
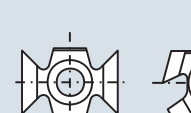
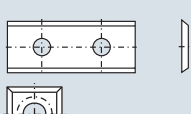
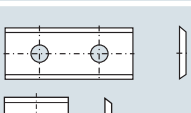


- EN Reversible knives and edge rounding knives
- DE Wendeschneidplatten und Kantenrunder
- FR Plaquettes réversibles et couteaux brise-arrête
- IT Coltelli reversibili e spigolatori
- ES Cuchillas reversibles y cuchillas para aristas



TOOLS CUT BETTER WITH TIGRA

- EN Reversible knives and edge rounding knives
 DE Wendeschneidplatten und Kantenrunder
 FR Plaquettes réversibles et couteaux brise-arrêt
 IT Coltelli reversibili e spigolatori
 ES Cuchillas reversibles y cuchillas para aristas

	EN Standard reversible knives 35° + 45° DE Standard Wendeschneidplatten 35° + 45° FR Plaquettes réversibles standard 35° + 45° IT Coltelli reversibili standard 35° + 45° ES Cuchillas reversibles standard 35° + 45°	22-24
	EN Reversible knives DE Wendeschneidplatten FR Plaquettes réversibles IT Coltelli reversibili ES Cuchillas reversibles	25
	EN Square knives DE Quadratische Wendeschneidplatten FR Plaquettes réversibles à quatre coupes IT Coltelli reversibili quadrati ES Cuchillas reversibles cuadradas	26 - 28
	EN Spurs, grooving knives DE Vorschneider, Nuter FR Araseur, couteaux pour rainures IT Rasanti, coltelli per incastri ES Incisores, cuchillas para ranura	29
	EN 4 cutting edges / special knives DE 4 Schneidkanten / Sondermesser FR 4 tranchants / couteaux spéciaux IT 4 taglienti / coltelli speciali ES 4 filos de corté / cuchillas especiales	30
	EN Face groove, back groove and crossgroove DE Brust-, Rücken- und Quernut FR Rainure sur grande face, sur petite face et transversal IT Scanalatura frontale, posteriore e di sicurezza ES Ranura frontal, de lomo y transversal	31
	EN Systems Leitz, Oertli, KWO/Versofix DE Systeme Leitz, Oertli, KWO/Versofix FR Systèmes Leitz, Oertli, KWO/Versofix IT Sistemi Leitz, Oertli, KWO/Versofix ES Sistemas Leitz, Oertli, KWO/Versofix	32 - 33
	EN Edge rounding knives DE Kantenrunder FR Couteaux brise-arrêt IT Spigolatori ES Cuchillas para aristas	34
	EN Matrix reversible knives DE Matrix Wendeschneidplatten FR Plaquettes réversibles Matrix IT Coltelli reversibili Matrix ES Cuchillas reversibles Matrix New! 	35 - 36
	EN Low price standard reversible knives DE Preiswerte Standard-Wendeschneidplatten FR Plaquettes réversibles standard à un prix avantageux IT Coltelli reversibili standard meno costosi ES Cuchillas reversibles standard New!	37

- EN Reversible knives - Carbide grades and their applications
 DE Wendeschneidplatten - Hartmetallsorten und ihre Anwendungen
 FR Plaquettes réversibles - Les nuances de carbures et leurs applications
 IT Coltelli reversibili - I tipi di metallo duro e le loro applicazioni
 ES Cuchillas reversibles - Calidades de metal duro y sus aplicaciones

EN DE FR IT ES	TIGRA grade TIGRA - Sorte Nuance TIGRA Tipo TIGRA Calidad TIGRA	ISO ISO ISO ISO ISO	USA USA USA Stati Uniti EE.UU.	Hardness Härte Dureté Durezza Dureza	Toughness Zähigkeit Ténacité Tenacità Tenacidad	Bending strength Biegebruchfestigkeit Résistance à la flexion Resistenza flessionale Resistencia a la flexión
	T02UMG	K01	C4+++			
	T02SMG	K01	C4+++			
	T03SMG	K01	C4++			
	T04MG-CR* old name: T08CR	K01	C4+			
	T04F UNIVERSAL	K05	C4			
	T05UMG	K01 - K10	C3++			
	T06MF	K20	C2			
	T08MF	K30	C2			
	T10MG	K10 - K40	C3+			
	TL15*	K10 - K40	C3+			

* EN Special binder
 * D Spezialbinder
 * F Liant spécial

* IT Legante speciale
 * ES Composición especial

EN For technical data, please refer to the pages 4-5.
 DE Die technischen Daten entnehmen Sie bitte den Seiten 4-5.
 FR Pour les données techniques, veuillez voir aux pages 4-5.

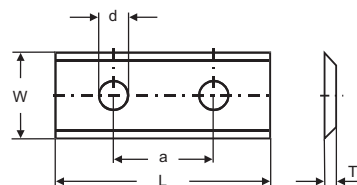
- EN Reversible knives - Carbide grades and their applications
 DE Wendeschneidplatten - Hartmetallsorten und ihre Anwendungen
 FR Plaquettes réversibles - Les nuances de carbures et leurs applications
 IT Coltelli reversibili - I tipi di metallo duro e le loro applicazioni
 ES Cuchillas reversibles - Calidades de metal duro y sus aplicaciones

Plastics Plastik Plastiques Plastica Plásticos	HDF HDF HDF HDF HDF	MDF MDF MDF MDF MDF	Chipboard Spanplatte Panneaux de particule Truciolare Panel de aglomerado	Hardwood Hartholz Bois dur Legno duro Madera dura	Softwood Weichholz Bois tendre Legno tenero Madera blanda	Main usage Hauptverwendung Usage principal Uso principale Uso principal
✓	✓	✓	○	✗	✗	EN MDF, HDF DE MDF, HDF FR MDF, HDF IT MDF, HDF ES MDF, HDF
✓	✓	✓	○	✗	✗	EN Chipboard, MDF, HDF DE Spanplatte, MDF, HDF FR Panneaux, MDF, HDF IT Truciolare, MDF, HDF ES Aglomerados, MDF, HDF
✓	✓	✓	✓	✗	✗	EN Chipboard, MDF DE Spanplatte, MDF FR Panneaux, MDF IT Truciolare, MDF ES Aglomerados, MDF
✓	○	✓	✓	✓	○	EN Tropical wood, very hard wood, chipboard, MDF DE Tropenholz, sehr hartes Holz, Spanplatte, MDF FR Bois tropical, bois très dur, panneaux, MDF IT Legni tropicali, legni molto duri, truciolare, MDF ES Madera tropical, madera muy dura, aglomerado, MDF
✓	○	✓	✓	✓	✓	EN Universal use DE Universeller Einsatz FR Utilisation universelle IT Uso universale ES Uso universal
✓	✗	○	✗	✓	✓	EN Special reversible knives DE Spezial-Wendeschneidplatten FR Plaquettes réversibles spéciales IT Coltelli reversibili speciali ES Cuchillas reversibles especiales
○	✗	✗	○	○	✓	EN Grooving knives DE Nuter FR Couteaux pour rainures IT Coltelli per incastri ES Cuchillas para ranura
✗	✗	✗	✗	✓	✓	EN Spurs, portable planers DE Vorschneider, Handhobel FR Araseurs, rabots électro portatif IT Rasanti, piallatrici portatili ES Incisores, cepilladoras electricas
○	✗	✗	✗	✓	✓	EN 45° reversible knives, planer knives, softwood DE 45°-Wendeschneidplatten, Hobelkopfplatten, Weichholz FR Plaquettes 45°, couteaux pour outils à raboter, bois tendre IT Coltelli a 45°, coltelli per teste da pialla, legni teneri ES Cuchillas 45°, cuchillas para cepillar, madera blanda
✗	✗	✗	✗	✓	✓	EN 45° reversible knives, wood with knots DE 45°-Wendeschneidplatten, Holz mit Ästen FR Plaquettes 45°, bois avec des nœuds IT Coltelli a 45°, legni nodosi ES Cuchillas 45°, madera con nudos

IT Per i dati tecnici, fare riferimento alle pagine 4-5.
 ES Para los datos técnicos, consulte las páginas 4-5.

- ✓ best performance
 ✓ very good performance
 ○ acceptable
 ✗ not suitable

EN Standard reversible knives
 DE Standard-Wendeschneidplatten
 FR Plaquettes réversibles standard
 IT Coltelli reversibili standard
 ES Cuchillas reversibles standard

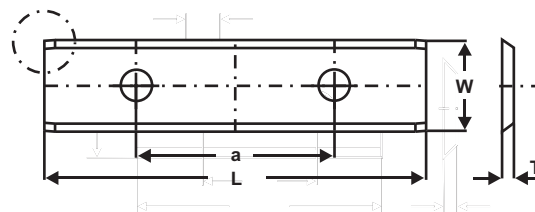


35°

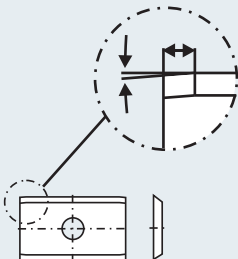
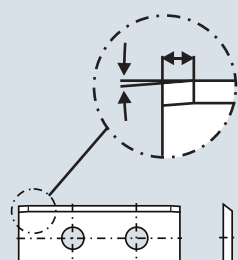
	L mm	W mm	T mm	a mm	T04F	T02UMG	T02SMG	T03SMG	T10MG	T04MG-CR (T08CR)
	7.5	12.0	1.5		012001			013811	013963	106822
	8.6	12.0	1.5		013182					
	9.0	12.0	1.5		012043					
	9.6	12.0	1.5		012015			013850	014010	106823
	10.0	12.0	1.5		013165					
	10.5	12.0	1.5		013167					
	11.0	12.0	1.5		013168					
	11.6	12.0	1.5		013183					
	13.0	12.0	1.5		013170					
	13.6	12.0	1.5		013185					
	14.6	12.0	1.5		013186					
	15.0	12.0	1.5		012003			013819	013972	106824
	15.7	12.0	1.5		013172					
	16.0	12.0	1.5		013203					
	17.0	12.0	1.5		013173					
	18.0	12.0	1.5		013174					
	19.0	12.0	1.5		013175					
	20.0	12.0	1.5		012004	115081	041587	013823	013977	104796
	25.0	12.0	1.5		012025			013853	014013	106826
	25.0	12.0	1.5	14.0	012011			013843	014001	106827
	30.0	12.0	1.5	14.0	012005	115082	037750	013828	013982	104795
	35.0	12.0	1.5	26.0	013208					
	40.0	12.0	1.5	26.0	012014	115083	052278	013847	014006	106828
	50.0	12.0	1.5	26.0	012006	115085	037901	013834	013987	106829
	60.0	12.0	1.5	26.0	012007	115086	054882	013839	013994	106830

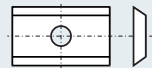
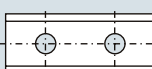
	L mm	W mm	T mm	a mm	T08MF	T03SMG	T10MG	T04MG-CR (T08CR)
	80.0	13.0	2.2	60.0	012008	013841	013997	106831
	100.0	13.0	2.2	60.0	012009	030831	013998	106832
	120.0	13.0	2.2	60.0	012010	030832	013999	106833

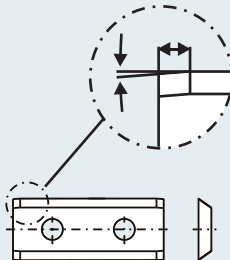
EN Reversible knives
DE Wendeschneidplatten
FR Plaquettes réversibles
IT Coltelli reversibili
ES Cuchillas reversibles



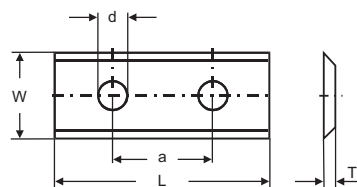
For use in planer heads!
Für Hobelköpfe!

	L mm	W mm	T mm		T04F	T10MG	T04MG-CR (T08CR)
	20.0	12.0	1.5	35°		013979	106674
	24.0	12.0	1.5	40°	104119	041060	106675
	24.7	12.0	1.5	35°	104120		106676
	30.0	12.0	1.5	35°	112875	013984	106677
	30.0	12.0	1.5	35°	118700		
	40.0	12.0	1.5	35°		014008	106678
	50.0	12.0	1.5	35°		013989	106679
	60.0	12.0	1.5	35°			106680

	L mm	W mm	T mm		T04F	T03SMG
	20.0	12.0	2.5	35°	100686	101037
	30.0	12.0	2.5	35°	054259	101038
	50.0	12.0	2.5	35°	100687	101039

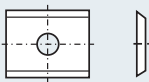
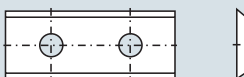
	L mm	W mm	T mm		T04F
	30.0	12.0	2.5	35°	102283

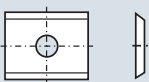
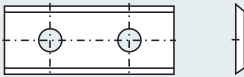
EN Reversible knives
 DE Wendeschneidplatten
 FR Plaquettes réversibles
 IT Coltelli reversibili
 ES Cuchillas reversibles



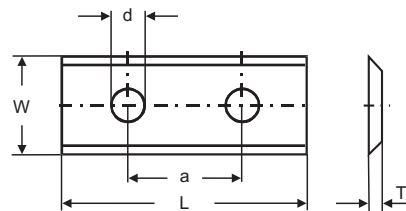
45°

>> MICROFINISH <<

	L mm	W mm	T mm	a mm		T10MG	TL15
	7.5	12.0	1.5		45°	014093	030861
	9.6	12.0	1.5		45°	014117	030864
	15.0	12.0	1.5		45°	014099	030862
	20.0	12.0	1.5		45°	014101	013782
	25.0	12.0	1.5		45°	014124	030865
	25.0	12.0	1.5	14.0	45°	014111	030863
	30.0	12.0	1.5	14.0	45°	014103	030866
	40.0	12.0	1.5	26.0	45°	014114	030870
	50.0	12.0	1.5	26.0	45°	014106	030868
	60.0	12.0	1.5	26.0	45°	014108	030869
	12.0	12.0	1.5		45°	014097	013779

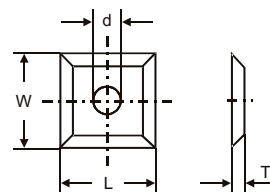
	L mm	W mm	T mm	a mm		T08MF	T10MG	TL15
	7.5	12.0	1.5		45°		014091	013777
	9.6	12.0	1.5		45°		014115	030851
	15.0	12.0	1.5		45°		014098	013780
	20.0	12.0	1.5		45°		014100	013781
	25.0	12.0	1.5		45°		014123	013788
	25.0	12.0	1.5	14.0	45°		014110	013786
	30.0	12.0	1.5	14.0	45°		014102	013783
	40.0	12.0	1.5	26.0	45°		014113	013787
	50.0	12.0	1.5	26.0	45°		014105	013784
	60.0	12.0	1.5	26.0	45°		014107	013785
	12.0	12.0	1.5		45°		014096	013778
	80.0	13.0	2.2	60.0	45°	013532	038233	

EN Reversible knives
 DE Wendeschneidplatten
 FR Plaquettes réversibles
 IT Coltelli reversibili
 ES Cuchillas reversibles

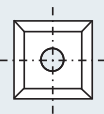
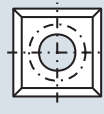
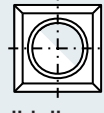
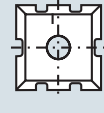


	L mm	W mm	T mm	a mm	T04F	T03SMG	T10MG
	20.0	14.3	2.5		013730	033492	033491
	44.5	15.0	1.5	25.0	013447		
	30.0	12.0	1.5	16.0	013449	033490	033477
	24.0	12.0	1.5		013241		
	30.0	12.0	1.5	14.0	013430	013924	033466
	50.0	12.0	1.5	26.0	013432	033470	033468
	30.0	12.0	1.5	14.0	013431	013925	033467
	50.0	12.0	1.5	26.0	013433	033471	033469
	20.0	12.0	1.5		013436	033480	033479
	20.0	12.0	1.5		013441	033481	033482
	30.0	12.0	1.5	14.0	013437	013926	033489
	40.0	12.0	1.5	26.0	013440		
	50.0	12.0	1.5	26.0	013438	013927	014038
	30.0	12.0	1.5	14.0	013442	013928	033484
	40.0	12.0	1.5	26.0	013445		
	50.0	12.0	1.5	26.0	013443	013929	014039

	L mm	W mm	T mm	a mm	T04F
	20.0	9.0	1.5		013195
	24.0	9.0	1.5	14.0	013197
	30.0	9.0	1.5	14.0	013199
	40.0	9.0	1.5	26.0	013200
	50.0	9.0	1.5	26.0	013201



EN Square knives
 DE Quadratische Wendeschneidplatten
 FR Plaquettes réversibles à quatre coupes
 IT Coltelli reversibili quadrati
 ES Cuchillas reversibles cuadradas

	L mm	W mm	T mm		d mm	T08MF	T04F	T02SMG	T03SMG	T10MG	T04MG-CR (T08CR)
	9.0	9.0	1.5	35°	4.0		100744				
	10.5	10.5	1.5	35°	4.0		013259		013863	014027	106834
	12.0	12.0	1.5	35°	4.0		012002	048357	013815	013968	106835
	13.0	13.0	2.5	35°	4.0	013328					
	17.0	17.0	2.0	35°	3.0	016565	016564				
	17.0	17.0	2.0	35°	4.0	013266	013265		013864	030830	106836
	19.0	19.0	2.0	35°	4.0		013264		030838	030827	106837
	10.5	10.5	1.5	35°							106682
	13.0	13.0	2.5	30°		013324					
	13.6	13.6	2.0	30°		013299					
	13.6	13.6	2.0	45°		037522					
	14.0	14.0	1.2	30°		013295					
	14.0	14.0	1.7	22°		013297					
	14.0	14.0	1.7	30°		013307					
 For Holz-Her system*	14.0	14.0	1.2	30°		013303					
	15.0	15.0	2.0			013322				014029	

* EN For use in Holz-Her cutterheads only

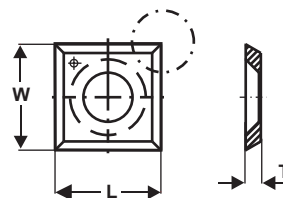
* DE Nur zur Verwendung in Messerköpfen der Firma Holz-Her

* FR Utilisation limitée aux porte outils de l'entreprise Holz-Her

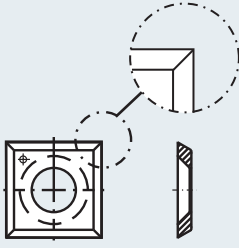
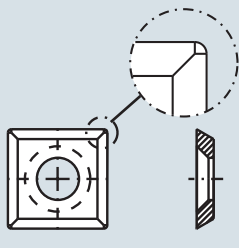
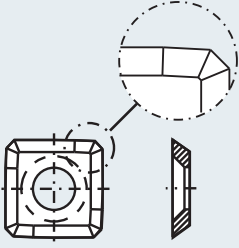
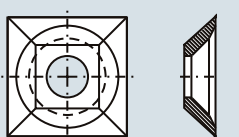
* IT Da usare solo su teste portacoltelli della Holz-Her

* ES Sólo para empleo con portacuchillas de la firma Holz-Her

EN Square knives
 DE Quadratische Wendeschneidplatten
 FR Plaquettes réversibles à quatre coupes
 IT Coltelli reversibili quadrati
 ES Cuchillas reversibles cuadradas

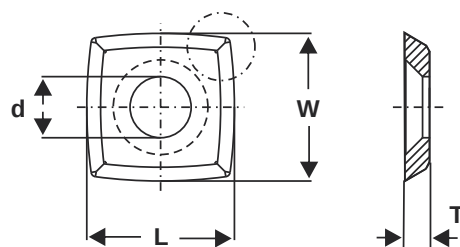


For use in planer heads!
 Für Hobelköpfe!

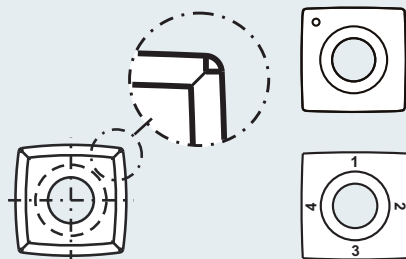
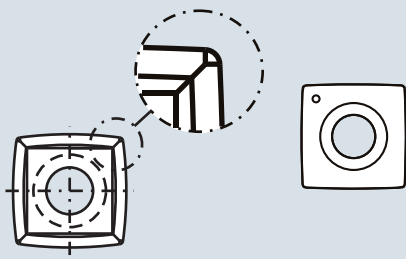
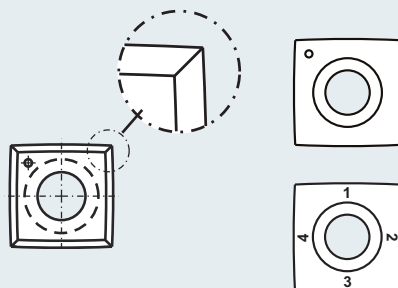
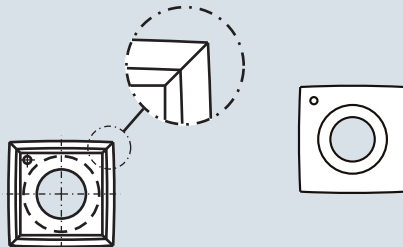
	L mm	W mm	T mm		T08MF	T04F	T10MG	T04MG-CR (T08CR)	TL15
Straight with sharp edges 	10.5	10.5	1.5	35°				106682	040343
	14.0	14.0	2.0	30°	013273	013260	014028	102558	013771
	14.0	14.0	2.0	37°	104295		104900		
	14.3	14.3	2.5	35°			013329	106683	
	14.6	14.6	2.5	30°			013314	106684	
	15.0	15.0	2.5	30°			013315	106685	
	15.0	15.0	2.5	37°			104062		
Straight with rounded edges 	14.0	14.0	2.0	30°	013276		104117		
	14.3	14.3	2.5	30°			104208		
	14.6	14.6	2.5	30°			013316		
	15.0	15.0	2.5	30°			104118		
	15.0	15.0	2.5	37°			109384		
For System Ledinek * left  right 	14.3	14.3	2.5	35°			053589		
	14.3	14.3	2.5	35°			053590		
	21.0	21.0	5.5	40°			022695		

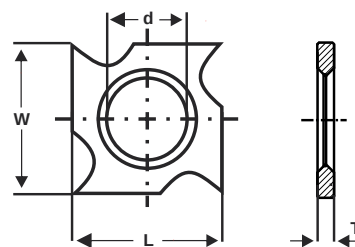
* EN For use in Ledinek-cutterheads only
 * DE Nur zur Verwendung in Messerköpfen der Firma Ledinek
 * FR Utilisation limitée aux porte outils de l'entreprise Ledinek
 * IT Da usare solo su teste portacoltelli della Ledinek
 * ES Sólo para empleo con portacuchillas de la firma Ledinek

EN Square knives
 DE Quadratische Wendeschneidplatten
 FR Plaquettes réversibles à quatre coupes
 IT Coltelli reversibili quadrati
 ES Cuchillas reversibles cuadradas

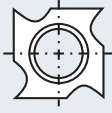
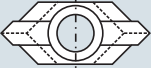


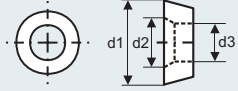
For use in planer heads!
 Für Hobelköpfe!

	L mm	W mm	T mm	R	T10MG
Cutting edge with radius and rounded edges 	15.0	15.0	2.5	R=150	013320
	15.0	15.0	2.5	R=150	101540
	15.0	15.0	2.5	R=115	115179
	14.0	14.0	2.0	R=150	100788
	14.6	14.6	2.5	R=150	052673
	15.0	15.0	2.5	R=50	043895
Cutting edge with radius and pointed edges 	15.0	15.0	2.5	R=150	100791
	15.0	15.0	2.5	R=100	101180
	15.0	15.0	2.5	R=150	104115
	14.0	14.0	2.0	R=150	100789
	14.6	14.6	2.5	R=150	100790
	15.0	15.0	2.5	R=50	101044

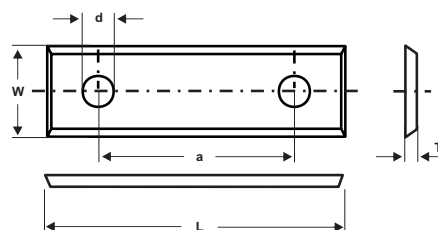


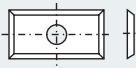
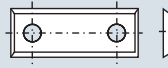
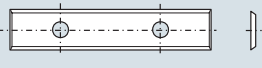
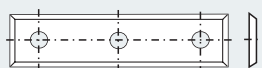
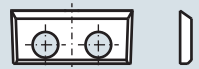
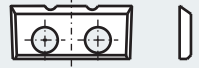
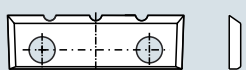
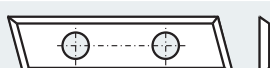
EN Spurs, grooving knives
 DE Vorschneider, Nuter
 FR Araseur, couteaux pour rainures
 IT Rasanti, coltelli per scanalature
 ES Incisores, cuchillas para ranura

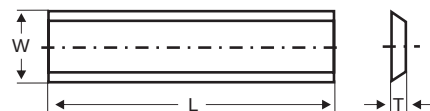
	L mm	W mm	T mm		d mm	T08MF	T04F	T06MF	T10MG
	18.0 18.0	18.0 18.0	1.95 2.45			013293 013291			
	18.0 18.0	18.0 18.0	2.95 3.70			013305 013289			
	22.9 22.0 (22.0	19.8 19.0 22.0	2.5 2.0 2.0)	30° 30°		045180 013271			
	14.0 16.0	28.0 16.0	2.0 3.0	30° 32°		013258 030829			
	18.5		3.25	30°					017190
	33.5				3.0	013252			
	18.9	7.9	4.0			013253			
	18.0	5.7	3.5			013255			
	24.5 24.5	13.0 13.0	4.0 5.0					053640 053641	
	34.0 34.0 34.0 34.0	16.0 16.0 16.0 16.0	4.0 5.0 6.0 7.0					013278 013279 013280 013281	

	d1 mm	d2 mm	d3 mm	T mm		T03SMG
	11.0	7.0	5.1	4.0		013373

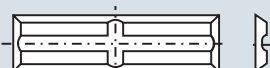
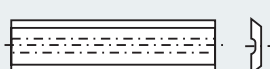
EN 4 cutting edges / special knives
 DE 4 Schneidkanten / Sondermesser
 FR 4 tranchants / couteaux spéciaux
 IT 4 taglienti / coltelli speciali
 ES 4 filos de corte / cuchillas especiales



	L mm	W mm	T mm	a mm	T04F	T03SMG	T10MG	TL15
	19.5	7.0	1.5		013492	030874	030886	030904
	19.5	7.5	1.5		013493	030875	030887	030905
	19.5	8.0	1.5		013494	013945	030888	030906
	19.5	9.0	1.5		013495	013946	030889	030907
	19.5	10.0	1.5		013496	030876	030890	030908
	19.5	11.0	1.5		013497	030877	030891	030909
	19.5	12.0	1.5		013498	013947	030892	013774
	29.5	7.0	1.5	14.0	013501	030878	030893	030910
	29.5	7.5	1.5	14.0	013502	013948	030894	030911
	29.5	8.0	1.5	14.0	013503	013949	030895	030912
	29.5	9.0	1.5	14.0	013504	013950	030896	030913
	29.5	10.0	1.5	14.0	013505	030879	030897	030914
	29.5	11.0	1.5	14.0	013506	030880	030898	030915
	29.5	12.0	1.5	14.0	013507	013952	014088	013775
	39.5	9.0	1.5	26.0	013511	045134		
	39.5	12.0	1.5	26.0	013512	013954	014089	030916
	49.5	8.0	1.5	26.0	013516	013955	030899	030917
	49.5	9.0	1.5	26.0	013517	013956	030900	030918
	49.5	10.0	1.5	26.0	013518	030881	030901	030919
	49.5	11.0	1.5	26.0	013519	030882	030902	030920
	49.5	12.0	1.5	26.0	013520	013957	014090	013776
	59.5	12.0	1.5	26.0	013523	013958	030903	030921
	50.0	9.0	1.5	37.0	016950	035425		
	50.0	10.0	1.7	37.0	016966	030883	030884	
	50.0	12.0	1.7	37.0	013327	013866	014030	
	16.0	7.0	1.5	7.0	016934	016933		
	23.0	7.0	1.5	14.0	053449			
	28.0	7.0	1.5	14.0	016823	016822		
	16.0	7.0	1.5	7.0	048995	052579		
	16.0	7.0	1.5	7.0	048996	052580		
	23.0	7.0	1.5	14.0	106866			
	23.0	7.0	1.5	14.0	106867			
	31.5	9.0	1.5	14.0	109149			



- EN Face groove, back groove and crossgroove
 DE Brust-, Rücken- und Quernut
 FR Rainure sur grande face, sur petite face et transversal
 IT Scanalatura frontale, posteriore e di sicurezza
 ES Ranura frontal, de lomo y transversal

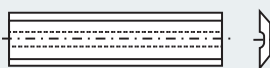
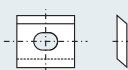
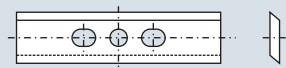
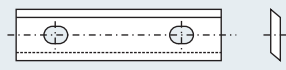
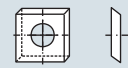
	L mm	W mm	T mm	T04F	T03SMG	Style
	12.0	5.5	1.1	013355	013882	EN Back groove DE Rückennut FR Rainure sur petite face IT Scanalatura posteriore ES Ranura de lomo
	20.0	5.5	1.1	013357	013884	
	30.0	5.5	1.1	013363	013890	
	40.0	5.5	1.1	013359	013886	
	50.0	5.5	1.1	013361	013888	
	20.0	4.1	1.1	013403		EN Back and crossgroove DE Rücken- und Quernut FR Rainure transversale IT Scanalatura di sicurezza ES Ranura transversal
	20.0	5.5	1.1	013394	013911	
	25.0	5.5	1.1	013402	013920	
	30.0	5.5	1.1	013397	013914	
	40.0	5.5	1.1	013399	013916	
	12.0	5.5	1.1	013334	013870	EN Face groove DE Brustnut FR Rainure sur grande face IT Scanalatura frontale ES Ranura frontal
	20.0	5.5	1.1	013336	013872	
	30.0	5.5	1.1	013345	013880	
	40.0	5.5	1.1	013339	013874	
	50.0	5.5	1.1	013342	013877	
	20.0	5.5	1.1	013378	030871	EN 4 Cutting edges DE 4 Schneidkanten FR 4 Tranchants IT 4 Taglienti ES 4 Filos de corte
	25.0	5.5	1.1	013376	030872	
	30.0	5.5	1.1	013379	030847	
	35.0	5.5	1.1	013377	013893	
	40.0	5.5	1.1	013380	013898	
	44.5	5.5	1.1	013375	030873	
	50.0	5.5	1.1	013381	013900	

EN Systems Leitz, Oertli
 DE Systeme Leitz, Oertli
 FR Systèmes Leitz, Oertli
 IT Sistemi Leitz, Oertli
 ES Sistemas Leitz, Oertli



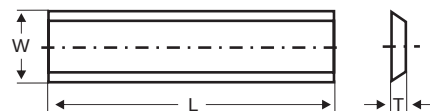
For Systems Leitz and Oertli

New!

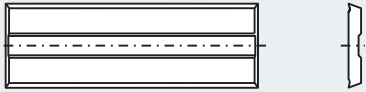
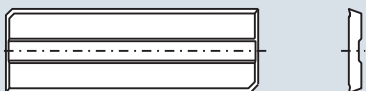
For Leitz system*	L mm	W mm	T mm	T04F	T03SMG	T10MG Microfinish
 New! *Matrix coating available, please see p. 36.	7.7	8.0	1.5	013457	013930	014042
	9.7	8.0	1.5	013470	013942	014066
	11.7	8.0	1.5	013458	013931	014044
	14.7	8.0	1.5	013459	013932	014046
	19.7	8.0	1.5	013460	013933	014048
	24.7	8.0	1.5	013472	013943	014069
	30.0	8.0	1.5	013461	013934	014050
	35.0	8.0	1.5	013462	013935	014052
	40.0	8.0	1.5	013463	013936	129364
	45.0	8.0	1.5	013488	049488	129365
	50.0	8.0	1.5	013464	013937	014056
	60.0	8.0	1.5	013466	013938	014058
	70.0	8.0	1.5	013478	030927	129368
	80.0	8.0	1.5	013467	013939	014060
	100.0	8.0	1.5	013468	013940	014062
	120.0	8.0	1.5	013469	049489	014064
	180.0	8.0	1.5			129591
	230.0	8.0	1.5			129592
	240.0	8.0	1.5			129593
	310.0	8.0	1.5			129594
For Oertli system*	L mm	W mm	T mm	T04F	T10MG	
	8.8	8.0	1.5	030931	017193	
	9.0	8.0	1.5	030932	017194	
	9.5	8.0	1.5	030933	017195	
	11.0	8.0	1.5	030934	017196	
	12.0	8.0	1.5	030935	017197	
	15.0	8.0	1.5	030936	017198	
	20.0	8.0	1.5	030937	017200	
	25.0	8.0	1.5	030938	017201	
	28.0	8.0	1.5	030939	017202	
	32.0	8.0	1.5	030940	017203	
	40.0	8.0	1.5	030941	017204	
	50.0	8.0	1.5	030942	017206	
	60.0	8.0	1.5	030943	017207	
	80.0	8.0	1.5	030944	017209	
	100.0	8.0	1.5	030945	017210	
	12.0	12.0	1.5	034294	034295	

EN For use in Leitz/Oertli-cutterheads only
 DE Nur zur Verwendung in Messerköpfen der Firma Leitz bzw. Oertli
 FR Utilisation limitée aux porte outils des entreprises Leitz et Oertli
 IT Da usare solo su teste portacoltelli della Leitz - Oertli
 ES Sólo para empleo con portacuchillas de la firma Leitz/Oertli

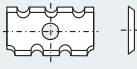
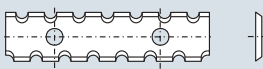
EN System KWO/Versofix
DE System KWO/Versofix
FR Système KWO/Versofix
IT Sistema KWO/Versofix
ES Sistema KWO/Versofix

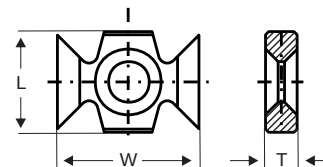


For SystemKWO/Versofix

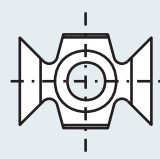
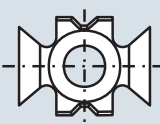
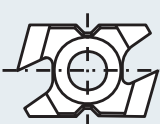
For KWO/Versofix system*	L mm	W mm	T mm	T03SMG TiN-coated	T10MG TiN-coated
	20.0	5.5	1.1	049525	049526
	30.0	6.5	1.1	101074	101075
	50.0	6.5	1.1	101078	101079
	20.0	10.0	1.5	014273	030841
	30.0	10.0	1.5	014275	030842
	50.0	10.0	1.5	014277	030843
 with chamfer	50.0	10.0	1.5	014279	030844

EN Reversible knives with chip breakers
DE Wendeschneidplatten mit Spanbrechernuten
FR Plaquettes réversibles avec brise copeaux
IT Coltellini con rompitruciolo
ES Cuchillas reversibles con rompevirutas

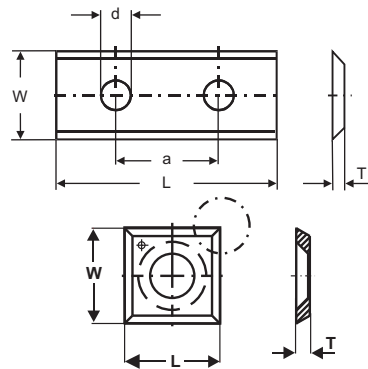
	L mm	W mm	T mm	a mm	T04F
	20.0	12.0	1.5		030928
	30.0	12.0	1.5	14.0	013117
	50.0	12.0	1.5	26.0	013127
	60.0	12.0	1.5	26.0	108318

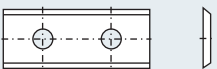
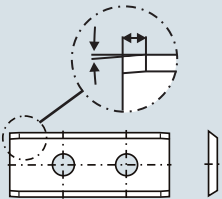
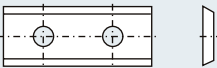
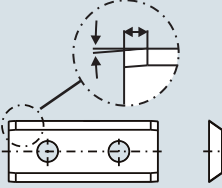
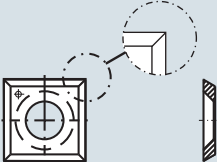
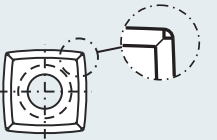
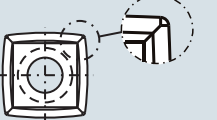
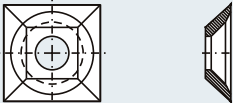


EN Edge rounding knives
 DE Kantenrunder
 FR Couteaux brise-arrête
 IT Spigolatori
 ES Cuchillas para aristas

		L mm	W mm	T mm	Type	T10MG
		16.0	22.0	5.0	TKM 45°	032292
		16.0	22.0	5.0	TKM R 1.5	032294
		16.0	22.0	5.0	TKM R 2.0	032295
		16.0	22.0	5.0	TKM R 2.5	032296
		16.0	22.0	5.0	TKM R 3.0	032297
		16.0	22.0	5.0	TKM R 4.0	032299
		16.0	22.0	6.0	TKM R 5.0	032301
 For Leitz-system „Mechanical“ *		15.0	20.0	8.0	TKM 11/0 - 45°	032304
		15.0	22.3	9.0	TKM 12/0 R3	032306
		15.0	20.0	7.3	TKM 12/3 R2	032308
		15.0	18.3	7.3	TKM 12/3 R2F	032309
		15.0	20.0	7.0	TKM 12/4 R1.5	032310
 For Leitz-system “BG-Test“ *		15.0	23.0	8.0	TKM 21/0 - 45°	032316
		15.0	23.0	9.0	TKM 22/0 R3	032318
		15.0	23.0	7.3	TKM 22/3 R2	032320
		15.0	23.0	7.0	TKM 22/4 R1.5	032322
		15.0	23.0	9.0	TKM 22/5 R3F	032323
		15.0	25.7	7.3	TKM 24/0 R5	032327
		15.0	25.7	7.3	TKM 24/1 R5	032326

EN Matrix Reversible knives
 DE Matrix Wendeschneidplatten
 FR Plaquettes réversibles Matrix
 IT Coltelli reversibili Matrix
 ES Cuchillas reversibles Matrix



	L mm	W mm	T mm	a mm		R	Matrix coated carbide
	30.0	12.0	1.5	14.0	35°		131350
	50.0	12.0	1.5	26.0	35°		131351
	30.0	12.0	1.5	14.0	35°		131436
	30.0	12.0	2.5	14.0			131352
	30.0	12.0	2.5	14.0	35°		131433
	14.0	14.0	2.0		30°		131437
	15.0	15.0	2.5		30°		131438
	15.0	15.0	2.5			R=150	131440
	14.6	14.6	2.5			R=150	131441
	15.0	15.0	2.5			R=50	131442
	21.0	21.0	5.5		40°		131439

EN Matrix Reversible knives
 DE Matrix Wendeschneidplatten
 FR Plaquettes réversibles Matrix
 IT Coltelli reversibili Matrix
 ES Cuchillas reversibles Matrix

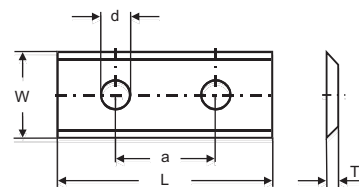
New!



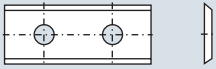
For System Leitz

For Leitz system*	L mm	W mm	T mm	Matrix coated carbide
	7.7	8.0	1.5	131443
	9.7	8.0	1.5	131444
	11.7	8.0	1.5	131445
	14.7	8.0	1.5	131446
	19.7	8.0	1.5	131447
	24.7	8.0	1.5	131448
	30.0	8.0	1.5	131449
	35.0	8.0	1.5	131450
	40.0	8.0	1.5	131451
	45.0	8.0	1.5	131452
	50.0	8.0	1.5	131453
	60.0	8.0	1.5	131454
	70.0	8.0	1.5	131455
	80.0	8.0	1.5	131456
	100.0	8.0	1.5	131457
	120.0	8.0	1.5	131458
	180.0	8.0	1.5	131459
	230.0	8.0	1.5	131460
	240.0	8.0	1.5	131461
	310.0	8.0	1.5	131462

- EN Low price standard reversible knives
 DE Preiswerte Standard-Wendeschneidplatten
 FR Plaquettes réversibles standard à un prix avantageux
 IT Coltelli reversibili standard meno costosi
 ES Cuchillas reversibles standard



- ECO -

	L mm	W mm	T mm	a mm	T10e
	20.0	12.0	1.5		127452
	30.0	12.0	1.5	14.0	125424
	40.0	12.0	1.5	26.0	125425
	50.0	12.0	1.5	26.0	127453
	60.0	12.0	1.5	26.0	127454

EN TIGRA grade	ISO	USA	Hardness	Toughness	Bending strength	Main usage
DE TIGRA - Sorte	ISO	USA	Härte	Zähigkeit	Biegebruchfestigkeit	Hauptverwendung
FR Nuance TIGRA	ISO	USA	Dureté	Ténacité	Résistance à la flexion	Usage principal
IT Tipo TIGRA	ISO	Stati Uniti	Durezza	Tenacità	Resistenza flessionale	Uso principale
ES Calidad TIGRA	ISO	EE.UU.	Dureza	Tenacidad	Resistencia a la flexión	Uso principal
T10e	K10 - K40	C3+				EN Wood, low price demands DE Holz, niedriger Preis FR Bois, prix bas IT Legno, prezzo ridotto ES Madera, precio economico



TOOLS CUT BETTER WITH TIGRA



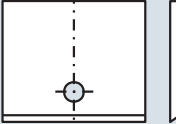
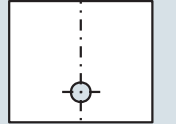
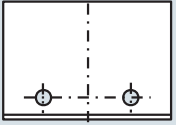
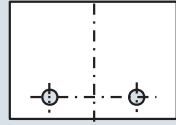
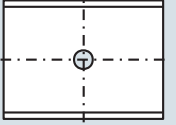
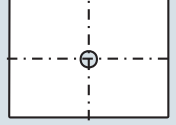
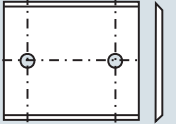
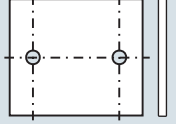
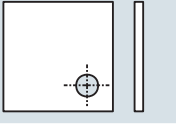
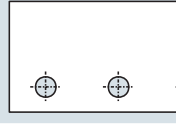
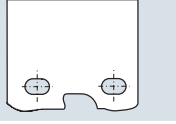
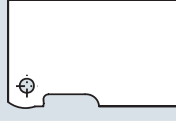
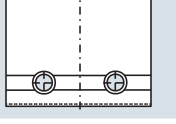
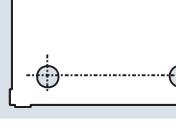
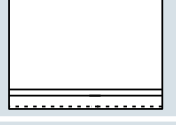
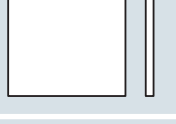
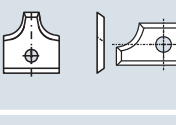
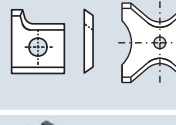
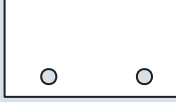
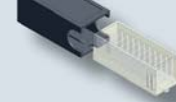


- UK Blanks for profiling and radius knives
- DE Blanketts zum Profilieren und Radiesplatten
- FR Plaquettes à profiler et plaquettes profilées
- IT Placchette da profilare e placchette profilate
- ES Placas para perfilar y perfiladas



TOOLS CUT BETTER WITH TIGRA

EN Blanks for profiling and radius knives
 DE Blanketts zum Profilieren und Radienplatten
 FR Plaquettes à profiler et plaquettes profilées
 IT Placchette da profilare e placchette profilate
 ES Placas para perfilar y perfiladas

		EN With 1 bore hole at the bottom DE Mit 1 Bohrung unten FR Avec 1 trou en bas IT Con 1 foro basso ES Con 1 taladro abajo	44 - 46
		EN With 2 bore holes at the bottom DE Mit 2 Bohrungen unten FR Avec 2 trous en bas IT Con 2 fori bassi ES Con 2 taladros abajo	47 - 51
		EN With 1 bore hole in the center DE Mit 1 Bohrung mittig FR Avec 1 trou au centre IT Con 1 foro centrale ES Con 1 taladro en el centro	52
		EN With 2 bore holes in the center DE Mit 2 Bohrungen mittig FR Avec 2 trous au centre IT Con 2 fori centrali ES Placas con 2 taladros en el centro	53 - 54
		EN Special blanks for profiling DE Spezial-Blanketts zum Profilieren FR Plaquettes spéciales à profiler IT Placchette speciali da profilare ES Placas especiales para perfilar	55
		EN Superprofiler DE Superprofiler FR Superprofiler IT Superprofiler ES Superprofiler	56 - 57
		EN Systems Freud / Leuco / Oertli, with crossgroove DE Systeme Freud / Leuco / Oertli, mit Quernut FR Systèmes Freud / Leuco / Oertli, avec rainure transversale IT Sistemi Freud / Leuco / Oertli, con scanalatura ES Sistemas Freud / Leuco / Oertli, con ranura transversal	58 - 60
		EN System Profilcut, with crossgroove DE System Profilcut, mit Quernut FR Système Profilcut, avec rainure transversale IT Sistema Profilcut, con scanalatura ES Sistema Profilcut, con ranura transversal	61 - 64
		EN Without bores DE Ohne Bohrung FR Sans trous IT Senza fori ES Sin taladro	65 - 66
		EN Profiled & preprofiled standard blanks DE Profilierte und vorprofilierte Standardblanketts FR Plaquettes standard profilées & préprofilées IT Placchette profilate & presagomate standard ES Placas perfiladas & preperfiladas standard	67 - 73
		EN Backing plates & packing DE Stützplatten & Verpackungen FR Supports & emballages IT Supporti & imballi ES Placas de soporte & embalaje	74 - 75

- EN Blanks for profiling and radius knives - Carbide grades and their applications
 DE Blanketts zum Profilieren und Radienplatten - Hartmetallsorten und ihre Anwendungen
 FR Plaquettes à profiler et plaquettes profilées - Les nuances de carbures et leurs applications
 IT Placchette da profilare e placchette profilate - I tipi di metallo duro e le loro applicazioni
 ES Placas para perfilar y perfiladas - Calidades de metal duro y sus aplicaciones

EN	TIGRA grade	ISO	USA	Hardness	Toughness	Bending strength
DE	TIGRA - Sorte	ISO	USA	Härte	Zähigkeit	Biegebruchfestigkeit
FR	Nuance TIGRA	ISO	USA	Dureté	Ténacité	Résistance à la flexion
IT	Tipo TIGRA	ISO	Stati Uniti	Durezza	Tenacità	Resistenza flessionale
ES	Calidad TIGRA	ISO	EE.UU.	Dureza	Tenacidad	Resistencia a la flexión
	T03SMG	K01	C4++			
	T04MG-CR* old name: T08CR	K01	C4+			
	T04F UNIVERSAL	K05	C4			
	T10MG	K10 - K40	C3+			
	TL15*	K10 - K40	C3+			

* EN Special binder * IT Legante speciale
 * D Spezialbinder * ES Composición especial
 * F Liant spécial

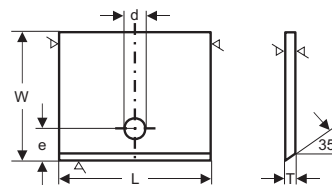
EN For technical data, please refer to the pages 4-5.
 DE Die technischen Daten entnehmen Sie bitte den Seiten 4-5.
 FR Pour les données techniques, veuillez voir aux pages 4-5.

- EN Blanks for profiling and radius knives - Carbide grades and their applications
 DE Blanketts zum Profilieren und Radienplatten - Hartmetallsorten und ihre Anwendungen
 FR Plaquettes à profiler et plaquettes profilées - Les nuances de carbures et leurs applications
 IT Placchette da profilare e placchette profilate - I tipi di metallo duro e le loro applicazioni
 ES Placas para perfilar y perfiladas - Calidades de metal duro y sus aplicaciones

Plastics Plastik Plastiques Plastica Plásticos	HDF HDF HDF HDF HDF	MDF MDF MDF MDF MDF	Chipboard Spanplatte Panneaux de particule Truciolare Panel de aglomerado	Hardwood Hartholz Bois dur Legno duro Madera dura	Softwood Weichholz Bois tendre Legno tenero Madera blanda	Main usage Hauptverwendung Usage principal Uso principale Uso principal
✓	✓	✓	✓	○	■	EN Man-made materials DE Künstlich hergestellte Materialien FR Matériaux synthétiques IT Materiali artificiali ES Materiales sintéticos
✓	○	✓	✓	✓	■	EN Tropical, abrasive hard woods; chipboard DE Tropische, abrasive Harthölzer; Spanplatte FR Tropical, abrasif bois durs; panneaux IT Legni duri tropicali, abrasivi; truciolare ES Tropical, maderas duras abrasivas; aglomerado
✓	○	✓	✓	✓	✓	EN Universal use DE Universeller Einsatz FR Usage universel IT Uso universale ES Uso universal
○	■	■	■	✓	✓	EN Natural wood, window tooling DE Naturholz, Fensterwerkzeuge FR Bois naturel, outillage de fenêtre IT Legni naturali, utensili per finestre ES Madera natural, utillaje de ventana
■	■	■	■	✓	✓	EN Wood with knots, high clearance angles DE Holz mit Ästen, große Freiwinkel FR Bois avec des noeuds, grands angles de dépouille IT Legni nodosi, ampi angoli di spoglia ES Madera con nudos, ángulos largos

- ✓ best performance
 ✓ very good performance
 ○ acceptable
 ■ not suitable

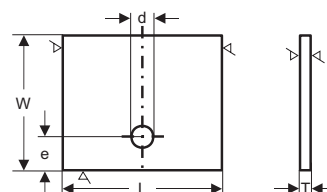
EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



EN With 1 bore hole at the bottom
 DE Mit 1 Bohrung unten
 FR Avec 1 trou en bas
 IT Con 1 foro basso
 ES Con 1 taladro abajo

L mm	W mm	T mm	d mm	e mm	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
15.0	15.4	2.0	4.1	6.3	014535	030949	106450	030950	014541
15.0	20.4	2.0	4.1	6.3	014553	014556	106467	014559	014561
15.0	25.4	2.0	4.1	6.3	014573	030951	106453	014577	014579
15.0	30.4	2.0	4.1	6.3	014590	030952	106454	014595	030953
15.8	30.4	2.0	4.1	6.3	014598	014599	106455	014601	014602
16.0	20.4	2.0	4.1	6.3	014609	030954	106470	030955	030956
19.8	30.4	2.0	4.1	6.3	014614	030957	106456	014616	030958
20.0	20.4	2.0	4.1	6.3	014648	014651	104857	014655	014657
20.0	25.4	2.0	4.1	6.3	014684	014688	104858	014692	014696
20.0	30.4	2.0	4.1	6.3	014723	014727	104629	014729	014733
20.0	35.4	2.0	4.1	6.3	014750	014753	104711	014756	014758
20.0	40.4	2.0	4.1	6.3	014768	030959	106457	030960	030961
25.0	20.4	2.0	4.1	6.3	014783	014786	106458	014789	014792
25.0	25.4	2.0	4.1	6.3	014812	014816	104663	014819	014824
25.0	30.4	2.0	4.1	6.3	014848	014851	105103	014856	014861
25.0	35.4	2.0	4.1	6.3	014880	014883	106095	014887	014889
30.0	20.4	2.0	4.1	6.3	014917	030962	106460	014922	014925
30.0	25.4	2.0	4.1	6.3	014970	014974	104664	014980	014986
30.0	30.4	2.0	4.1	6.3	015045	015049	105255	015054	015059
30.0	35.4	2.0	4.1	6.3	015104	015108	106461	015113	015116
30.0	40.4	2.0	4.1	6.3	015148	030963	106463	015154	015157
35.0	20.4	2.0	4.1	6.3	015261	030964	106465	015265	015267
35.0	25.4	2.0	4.1	6.3	015286	030965	104922	015290	015293
35.0	30.4	2.0	4.1	6.3	015334	030966	106466	015339	015342
35.0	35.4	2.0	4.1	6.3	015368	030967	105510	015372	015375
35.0	40.4	2.0	4.1	6.3	015398	030968	105203	015403	030969

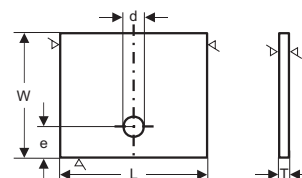
EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



EN With 1 bore hole at the bottom
 DE Mit 1 Bohrung unten
 FR Avec 1 trou en bas
 IT Con 1 foro basso
 ES Con 1 taladro abajo

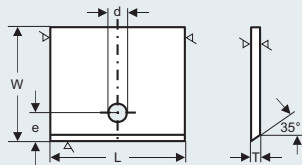
L	W	T	d	e	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
mm	mm	mm	mm	mm					
15.0	15.4	2.0	4.1	6.5	014536	030982	106468	014540	030983
15.0	20.4	2.0	4.1	6.5	014554	014557	106469	014560	030984
15.0	25.4	2.0	4.1	6.5	014574	030985	106471	014578	014580
15.0	30.4	2.0	4.1	6.5	014591	030986	106472	014596	030987
16.0	20.4	2.0	4.1	6.5	014610	030988	105221	030989	030990
18.0	18.3	2.0	4.1	6.0	018849	030991	106473	030992	018850
20.0	20.4	1.5	4.1	6.5	040831		106474		040940
20.0	20.4	2.0	4.1	6.5	014649	014652	106475	014656	014659
20.0	25.4	2.0	4.1	6.5	014686	030993	106476	014694	014698
20.0	25.3	2.0	4.1	6.0	018851	030994	106477	030995	030996
20.0	30.4	2.0	4.1	6.5	014725	030997	106478	014731	014735
20.0	35.4	2.0	4.1	6.5	014751	030998	106479	014757	030999
20.0	40.4	2.0	4.1	6.5	031018	031019	106480	031020	012954
24.0	28.3	2.0	4.1	6.0	018852	031000	106481	031001	018853
25.0	25.4	2.0	4.1	6.5	014813	014817	106482	014820	014827
25.0	30.4	2.0	4.1	6.5	014849	014852	106483	014858	014863
25.0	30.4	2.0	5.8	6.5	019470				032399
25.0	35.4	2.0	4.1	6.5	014881	014884	106485	014888	014890
30.0	20.4	2.0	4.1	6.5	014918	031002	106486	014923	014927
30.0	25.4	2.0	4.1	6.5	014972	031003	106487	014982	014988
30.0	30.4	2.0	4.1	6.5	015047	015050	106488	015056	015060
30.0	30.4	2.0	6.0	6.5	019385		106490		032403
30.0	35.4	2.0	4.1	6.5	015106	031004	106491	015114	031005
30.0	40.4	2.0	4.1	6.5	015149	015151	106493	015155	015158
32.0	22.3	2.0	4.1	6.0	018855	031006	106494	031007	031008
35.0	20.4	2.0	4.1	6.5	015262	031009	106495	015266	031010
35.0	25.4	2.0	4.1	6.5	015287	031011	106496	015291	015294
35.0	30.4	2.0	4.1	6.5	015335	031012	106497	015340	031013
35.0	35.4	2.0	4.1	6.5	015369	031014	106498	015373	015376
35.0	40.4	2.0	4.1	6.5	015399	015401	106499	015404	015405
35.0	40.4	2.0	6.1	6.0	019731		106500		032407
40.0	30.3	2.0	4.1	6.0	018856	031015	106501	031016	031017

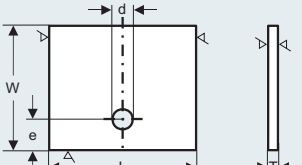
EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



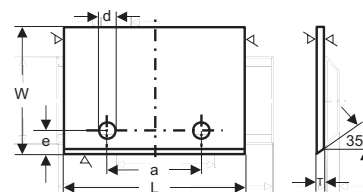
Italian
Style

EN With 1 bore hole at the bottom
 DE Mit 1 Bohrung unten
 FR Avec 1 trou en bas
 IT Con 1 foro basso
 ES Con 1 taladro abajo

	L	W	T	d	e	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
	mm	mm	mm	mm	mm					
	15.0	15.4	2.0	4.5	6.5	031021	014545	106441	014547	031022
	15.0	20.4	2.0	4.5	6.5	034989	014566	106503	014569	031023
	15.0	25.4	2.0	4.5	6.5	034971	014584	106504	014585	031025
	15.0	30.4	2.0	4.5	6.5	034972	014604	103432	014606	031027
	20.0	20.4	2.0	4.5	6.5	034973	014664	106505	014665	031029
	20.0	25.4	2.0	4.5	6.5	034974	014706	106506	014708	031030
	20.0	30.4	2.0	4.5	6.5	034975	014739	106181	014741	031031
	20.0	35.4	2.0	4.5	6.5	034976	014762	106507	014764	031032
	25.0	20.4	2.0	4.5	6.5	034977	014797	106508	014799	031033
	25.0	25.4	2.0	4.5	6.5	034978	014832	106509	014834	031034
	25.0	30.4	2.0	4.5	6.5	034979	014869	106510	014871	031035
	25.0	35.4	2.0	4.5	6.5	034980	014893	106511	014895	031036
	30.0	20.4	2.0	4.5	6.5	034981	014932	106512	014935	031037
	30.0	25.4	2.0	4.5	6.5	034982	014993	106513	014995	031038
	30.0	30.4	2.0	4.5	6.5	034983	015064	106514	015068	031039
	30.0	35.4	2.0	4.5	6.5	034984	015122	106515	015124	031040
	35.0	25.4	2.0	4.5	6.5	034986	015299	106516	015301	031042
	35.0	30.4	2.0	4.5	6.5	034987	015345	106518	015347	031043

	L	W	T	d	e	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
	mm	mm	mm	mm	mm					
	15.0	20.4	2.0	4.5	6.5	034970	012955	106519	014570	031047
	15.0	25.4	2.0	4.5	6.5	034990	031045	106520	031046	014586
	15.0	30.4	2.0	4.5	6.5	034991	031049	106521	014607	031050
	20.0	20.4	2.0	4.5	6.5	034992	031051	106522	014666	014667
	20.0	25.4	2.0	4.5	6.5	034993	031053	106523	014709	014710
	20.0	30.4	2.0	4.5	6.5	034994	031056	106525	014742	014743
	20.0	35.4	2.0	4.5	6.5	034995	031058	106526	014765	031059
	25.0	20.4	2.0	4.5	6.5	041075	100453	106527	014800	041076
	25.0	25.4	2.0	4.5	6.5	034996	031061	106528	014835	014836
	25.0	30.4	2.0	4.5	6.5	034997	031063	106529	014872	031064
	25.0	35.4	2.0	4.5	6.5	038344	100454	106530	014896	041077
	30.0	20.4	2.0	4.5	6.5	034998	014933	106531	031066	031067
	30.0	25.4	2.0	4.5	6.5	038900	100455	106532	014996	041079
	30.0	30.4	2.0	4.5	6.5	015066	015065	106533	015069	031069
	30.0	35.4	2.0	4.5	6.5	042107	100458	106534	100456	100457
	30.0	40.4	2.0	4.5	6.5	042108	100460	106535	015163	100459

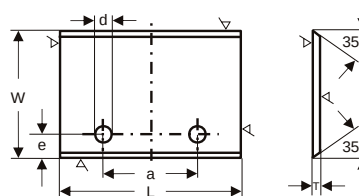
EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



EN With 2 bore holes at the bottom
 DE Mit 2 Bohrungen unten
 FR Avec 2 trous en bas
 IT Con 2 fori bassi
 ES Con 2 taladros abajo

L mm	W mm	T mm	d mm	a mm	e mm	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
24.0	20.4	2.0	4.1	12.0	6.0	017436	041295	106537	041296	041297
30.0	20.4	2.0	4.1	14.0	6.0	017771	031072	106538	031073	031074
30.0	20.4	2.0	4.1	14.0	5.5	014937	031070	106539	014940	031071
30.0	20.4	2.0	4.1	14.0	6.3	039328	041232	106584	041233	041234
30.0	25.4	2.0	4.1	14.0	5.5	014999	012956	106541	012957	031167
30.0	25.4	2.0	4.1	14.0	6.3	015007	015008	106542	031075	015009
30.0	30.4	2.0	4.1	14.0	5.5	015072	031076	106543	031077	031078
30.0	30.4	2.0	4.1	14.0	6.3	039329	041235	106547	041236	041237
30.0	35.4	2.0	4.1	14.0	5.5	015125	031079	106550	031080	015130
30.0	35.4	2.0	4.1	14.0	6.3	019495	041238	106552	041239	041240
30.0	40.4	2.0	4.1	20.0	5.5	015164	031081	106554	031082	031083
31.8	25.4	2.0	4.1	16.0	6.3	041067	041348	106556	036909	041349
35.0	20.4	2.0	4.1	14.0	5.5	031085	031084	106557	031086	015276
35.0	20.4	2.0	4.1	20.0	5.5	031087	031088	106558	031089	015278
35.0	20.4	2.0	4.1	26.0	5.5	015274	031090	106560	031091	031092
35.0	25.4	2.0	4.1	26.0	5.5	015305	031093	106561	015311	015313
35.0	25.4	2.0	4.1	14.0	6.3	039575	041241	106562	041242	041243
35.0	25.4	2.0	4.1	18.0	6.3	019885	041335	106563	041336	041337
35.0	30.4	2.0	4.1	20.0	5.5	015356	031094	106564	031095	015357
35.0	30.4	2.0	4.1	14.0	6.3	039576	041244	104828	041245	041246
35.0	35.4	2.0	4.1	14.0	6.3	039577	041247	106566	041248	041249
35.0	40.4	2.0	4.1	20.0	5.5	015410	031096	106567	031097	015415
35.0	40.4	2.0	4.1	14.0	6.3	039578	041250	106568	041251	041252
40.0	20.4	2.0	4.1	26.0	5.5	015440	015443	106569	015447	015451
40.0	20.4	2.0	4.1	26.0	6.3	039566	041253	105622	041254	036345
40.0	25.4	2.0	4.1	20.0	5.5	015502	031098	106570	031099	031100
40.0	25.4	2.0	4.1	26.0	5.5	015482	015486	106572	015492	015497
40.0	25.4	2.0	4.1	26.0	6.0	017623	031101	106573	031102	031103
40.0	25.4	2.0	4.1	26.0	6.3	039330	041255	106097	041256	041257
50.0	20.4	2.0	4.1	26.0	6.3	039392	015821	106588	041265	036337
50.0	25.4	2.0	4.1	26.0	5.5	015841	015846	106589	015849	015852
50.0	25.4	2.0	4.1	26.0	6.3	039568	041266	104829	041267	036341

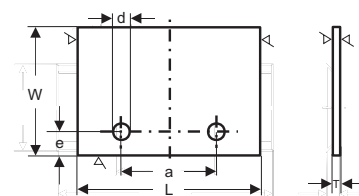
EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



EN With 2 bore holes at the bottom
 DE Mit 2 Bohrungen unten
 FR Avec 2 trous en bas
 IT Con 2 fori bassi
 ES Con 2 taladros abajo

L mm	W mm	T mm	d mm	a mm	e mm	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
40.0	30.0	2.0	4.1	20.0	5.5	015542	015545	106575	015548	015553
40.0	30.0	2.0	4.1	26.0	5.5	015560	015563	106576	015566	015569
40.0	30.0	2.0	4.1	26.0	6.3	015571	041258	105656	041259	038185
40.0	35.0	2.0	4.1	26.0	5.5	015611	015613	106577	015620	015624
40.0	35.0	2.0	4.1	26.0	6.0	015629	031104	106578	031105	031106
40.0	35.0	2.0	4.1	20.0	5.5	015630	031107	106579	031108	015632
40.0	35.0	2.0	4.1	26.0	6.3	039331	041260	104665	041261	041262
40.0	40.0	2.0	4.1	26.0	6.0	015646	031109	106580	015649	015652
40.0	40.0	2.0	4.1	20.0	6.0	015655	015658	106582	015659	031110
40.0	40.0	2.0	4.1	26.0	6.3	039567	041263	105990	041264	038186
40.0	45.0	2.0	4.1	26.0	6.0	019372	041333	106583	041334	019373
50.0	16.0	2.0	4.1	26.0	5.5	017639	031111	106585	031112	031113
50.0	16.0	2.0	4.1	26.0	6.0	015794	031114	106586	015796	031115
50.0	20.0	2.0	4.1	26.0	5.5	015804	031116	106587	031117	015815
50.0	30.0	2.0	4.1	26.0	5.5	015871	015874	106590	015878	015880
50.0	30.0	2.0	4.1	26.0	6.3	039569	038369	105657	015884	038188
50.0	35.0	2.0	4.1	26.0	6.0	015904	031120	106592	031121	031122
50.0	35.0	2.0	4.1	26.0	5.5	015905	031123	106593	031124	031125
50.0	35.0	2.0	4.1	26.0	6.3	018387	041268	105204	041269	041270
50.0	40.0	2.0	4.1	34.0	6.0	015916	031126	106594	031127	031128
50.0	40.0	2.0	4.1	26.0	6.3	019030	041271	105989	041272	035746
50.0	45.0	2.0	4.1	34.0	6.0	015940	015942	106595	031129	031130
50.0	45.0	2.0	4.1	26.0	6.3	039579	041273	106596	041274	041275
50.0	50.0	2.0	4.1	34.0	6.0	015953	031131	106597	031132	031133
60.0	20.0	2.0	4.1	26.0	5.5	016001	031134	106599	031135	031136
60.0	25.0	2.0	4.1	26.0	5.5	016031	031140	106601	016037	016040
60.0	25.0	2.0	4.1	44.0	5.5	016046	031141	106602	016047	031142
60.0	30.0	2.0	4.1	26.0	6.0	016068	031143	106603	031144	016074
60.0	30.0	2.0	4.1	26.0	6.3	039571	041276	104861	016082	038189
60.0	30.0	2.0	4.1	44.0	6.0	016076	031145	106604	031146	016077
60.0	35.0	2.0	4.1	26.0	6.0	016114	031147	106605	016119	016123
60.0	35.0	2.0	4.1	26.0	6.3	039572	041277	104859	041278	038190
60.0	35.0	2.0	4.1	44.0	6.0	016126	031148	106606	031149	031150
60.0	40.0	2.0	4.1	26.0	6.3	039573	041279	106098	041280	036782
60.0	40.0	2.0	4.1	44.0	6.0	016158	016164	106607	016170	016175
60.0	45.0	2.0	4.1	44.0	6.0	019375	019374	106609	031151	019376
75.0	30.0	2.0	4.1	44.0	6.0	016258	031152	106610	031153	031154
80.0	30.0	2.0	4.1	60.0	6.3	039580	041283	106003	041284	041285
80.0	35.0	2.0	4.1	60.0	6.3	041286	041287	106273	041288	041289
80.0	40.0	2.0	4.1	60.0	6.3	041292	041293	106612	041294	035745
80.0	45.0	2.5	4.1	60.0	6.0	016321	031155	106613	016323	016324
100.0	45.0	2.5	4.2	80.0	6.0	014519	031159	105295	031160	031161
120.0	45.0	2.5	4.2	80.0	6.0	014528	031165	106615	031166	014529

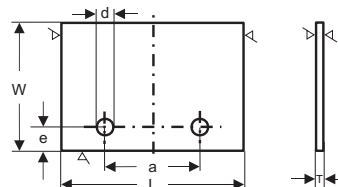
EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



EN With 2 bore holes at the bottom
 DE Mit 2 Bohrungen unten
 FR Avec 2 trous en bas
 IT Con 2 fori bassi
 ES Con 2 taladros abajo

L mm	W mm	T mm	d mm	a mm	e mm	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
19.0	30.0	2.0	3.6	8.0	4.75	017790	031963	106616	031964	031965
25.4	30.6	2.0	3.6	14.3	4.75	017791	031966	106617	031967	031968
30.0	20.4	2.0	4.1	14.0	6.5	014938	014939	106621	014941	014943
30.0	25.4	2.0	4.1	14.0	6.5	015000	015001	106622	015003	015005
30.0	25.4	2.0	4.1	19.0	4.75	017603	031969	106623	031970	017604
30.0	25.4	2.0	4.1	19.0	6.5	019428	031971	106624	031972	031973
30.0	30.4	2.0	4.1	14.0	6.5	015073	015074	106625	015077	015078
30.0	30.2	2.0	4.1	19.0	4.75	017605	031974	106626	031975	031976
30.0	30.0	2.0	3.6	19.0	4.75	017785	031977	106627	031978	017787
30.0	35.4	2.0	6.0	12.0	6.0	033964	041327	106628	041328	041329
30.0	35.4	2.0	4.1	14.0	6.5	015126	015127	106629	015129	015132
30.0	40.4	2.0	4.1	14.0	6.5	015165	015166	106630	031979	031981
35.0	20.4	2.0	4.1	14.0	6.5	015275	031988	106631	031989	031990
35.0	25.4	2.0	4.1	14.0	6.5	015306	015308	106632	015312	015314
35.0	30.4	2.0	4.1	14.0	6.5	015351	031991	106633	015354	031992
35.0	35.4	2.0	4.1	20.0	4.8	019831	041330	106634	041331	041332
35.0	35.4	2.0	4.1	14.0	6.5	015383	031993	106635	015385	015386
35.0	40.4	2.0	4.1	14.0	6.5	015411	015412	106636	015414	015416
40.0	20.4	2.0	5.5	26.0	5.5	037885	041338	106637	041339	041340
40.0	20.4	2.0	4.1	26.0	6.5	015441	015444	106638	015448	015452
40.0	25.4	2.0	4.1	26.0	6.5	015484	015487	106639	015493	015499
40.0	30.2	2.0	5.0	27.0	6.3	035290	041298	106640	041299	039325
40.0	30.4	2.0	4.1	26.0	6.5	015544	031994	106642	015550	015554
40.0	30.4	2.0	6.0	26.0	5.5	019253		106643		032414
40.0	35.4	2.0	5.0	27.0	6.3	018955	041300	106644	041301	041302
40.0	35.4	2.0	4.1	26.0	6.5	015612	015614	106645	015622	015625
40.0	35.4	2.0	6.0	26.0	5.5	019471		106646		032415
40.0	40.2	2.0	5.0	27.0	6.3	019002	041303	106647	041304	041305
40.0	40.4	2.0	4.1	26.0	6.5	015647	031995	106648	015650	015654
40.0	40.4	2.0	6.0	26.0	5.5	019254		106649		032416
40.0	45.4	2.0	4.1	26.0	6.5	015676	031996	106650	015677	031997

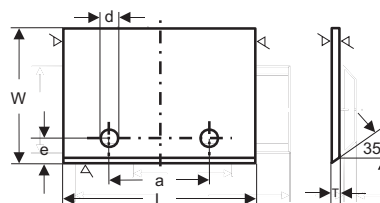
EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



EN With 2 bore holes at the bottom
 DE Mit 2 Bohrungen unten
 FR Avec 2 trous en bas
 IT Con 2 fori bassi
 ES Con 2 taladros abajo

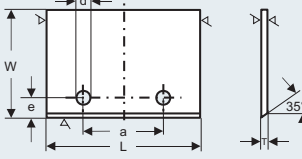
L mm	W mm	T mm	d mm	a mm	e mm	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
50.0	20.4	2.0	4.1	26.0	6.5	015805	015808	106651	015813	015817
50.0	20.4	2.0	4.1	24.0	6.0	019600	041341	106652	041342	041343
50.0	25.2	2.0	5.0	26.0	6.5	019065	041306	106653	041307	041308
50.0	25.4	2.0	4.1	26.0	6.5	015843	015847	106654	015850	015854
50.0	30.4	2.0	4.1	26.0	6.5	015872	015875	106655	015879	032001
50.0	30.4	2.0	6.0	26.0	6.5	019382		106656		032422
50.0	32.4	2.0	4.1	24.0	6.0	018857	031998	106657	031999	032000
50.0	35.4	2.0	4.1	26.0	6.5	015897	015898	106658	015902	032002
50.0	40.4	2.0	4.1	26.0	6.5	015917	032003	106659	015920	015922
50.0	40.4	2.0	6.0	26.0	6.5	019383		106660		032424
50.0	45.4	2.0	4.1	26.0	6.5	015941	032004	106661	032005	032006
50.0	50.4	2.0	4.1	26.0	6.5	015954	015955	106663	015956	032007
60.0	20.4	2.0	4.1	26.0	6.5	016002	016003	106664	016007	032009
60.0	25.4	2.0	4.1	26.0	6.5	016033	032010	106665	016038	016042
60.0	30.4	2.0	4.1	26.0	6.5	016069	016070	106666	016072	032011
60.0	35.4	2.0	4.1	26.0	6.5	016116	032012	106667	016121	016125
60.0	40.4	2.0	4.1	26.0	6.5	016160	032013	106668	016172	016177
80.0	25.2	2.0	4.1	60.0	6.5	035291	041309	106669	041310	041311
80.0	30.4	2.0	4.1	26.0	6.5	016276	032014	106670	016279	016281
80.0	35.4	2.0	4.1	26.0	6.5	016290	032015	106672	016292	032016

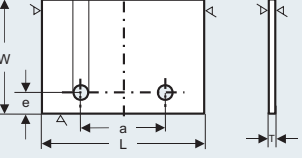
EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



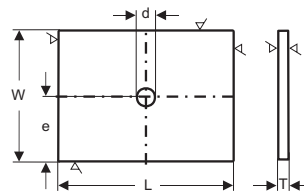
Italian
Style

EN With 2 bore holes at the bottom
 DE Mit 2 Bohrungen unten
 FR Avec 2 trous en bas
 IT Con 2 fori bassi
 ES Con 2 taladros abajo

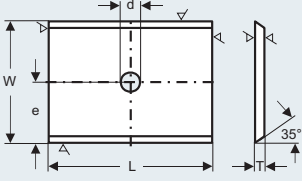
	L mm	W mm	T mm	d mm	a mm	e mm	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
	30.0	25.4	2.0	4.5	14.0	6.5	035066	015013	106686	015015	031590
	30.0	30.4	2.0	4.5	14.0	6.5	012981	015084	106687	015088	031591
	30.0	35.4	2.0	4.5	14.0	6.5	035069	015134	106688	015136	031592
	40.0	20.4	2.0	4.5	26.0	6.5	012982	015457	106689	015460	031597
	40.0	25.4	2.0	4.5	26.0	6.5	035073	015504	106690	015508	031598
	40.0	30.4	2.0	4.5	26.0	6.5	035075	015574	106691	015577	031599
	50.0	20.4	2.0	4.5	26.0	6.5	035078	015823	106692	015826	031600
	50.0	35.4	2.0	4.5	26.0	6.5	035082	015907	106693	015909	031601
	60.0	20.4	2.0	4.5	26.0	6.5	035084	016010	106694	016012	031603
	60.0	30.4	2.0	4.5	26.0	6.5	016084	043981	106695	016086	041090
	60.0	35.4	2.0	4.5	26.0	6.5	035086	016130	106696	016132	031604
	80.0	20.4	2.0	4.5	26.0	6.5	035089	016264	106697	031607	031608
	80.0	25.4	2.0	4.5	26.0	6.5	035090	016270	106698	016272	031609

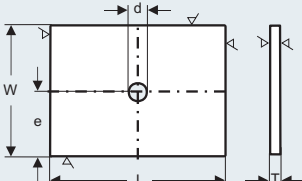
	L mm	W mm	T mm	d mm	a mm	e mm	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
	30.0	20.4	2.0	4.5	14.0	6.5	014947	100044	106699	050284	050285
	30.0	25.4	2.0	4.5	14.0	6.5	035067	031610	106700	031612	015016
	30.0	30.4	2.0	4.5	14.0	6.5	015085	033517	106701	015086	015089
	30.0	35.4	2.0	4.5	14.0	6.5	035070	031615	106703	031616	015137
	35.0	25.4	2.0	4.5	14.0	6.5	015320	040122	106704	050286	015321
	35.0	30.4	2.0	4.5	14.0	6.5	042115	054676	106705	050287	050288
	35.0	35.4	2.0	4.5	14.0	6.5	015389	100326	106706	050289	015390
	40.0	20.4	2.0	4.5	26.0	6.5	015458	100327	106707	015461	041094
	40.0	25.4	2.0	4.5	26.0	6.5	035074	031617	106708	015509	031643
	40.0	30.4	2.0	4.5	26.0	6.5	035076	015575	106709	015578	015579
	40.0	35.4	2.0	4.5	26.0	6.5	012980	015635	106710	031621	015638
	40.0	40.4	2.0	4.5	26.0	6.5	035077	031623	106711	015667	015668
	50.0	20.4	2.0	4.5	26.0	6.5	035079	015824	106712	015827	015860
	50.0	25.4	2.0	4.5	26.0	6.5	035080	031626	106713	031627	012974
	50.0	30.4	2.0	4.5	26.0	6.5	035081	031629	106714	015889	015890
	50.0	35.4	2.0	4.5	26.0	6.5	042117	040132	106715	050290	050291
	50.0	40.4	2.0	4.5	26.0	6.5	042118	040133	106716	015927	050292
	60.0	20.4	2.0	4.5	26.0	6.5	035085	031630	106717	016013	031632
	60.0	25.4	2.0	4.5	26.0	6.5	041095	040134	106718	036875	041096
	60.0	30.4	2.0	4.5	26.0	6.5	042121	100765	106719	050282	050283
	60.0	35.4	2.0	4.5	26.0	6.5	035087	031633	106720	016133	031636
	60.0	40.4	2.0	4.5	26.0	6.5	042122	100332	106721	050293	050294
	80.0	30.4	2.0	4.5	26.0	6.5	035091	031637	106722	016286	031639
	80.0	35.4	2.0	4.5	26.0	6.5	035092	031641	106723	016300	031640
	80.0	40.4	2.0	4.5	26.0	6.5	042124	100333	106724	100334	100335

EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar

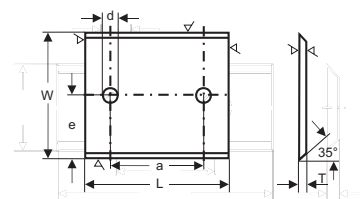


EN With 1 bore hole in the center
 DE Mit 1 Bohrung mittig
 FR Avec 1 trou au centre
 IT Con 1 foro centrale
 ES Con 1 taladro en el centro

	L mm	W mm	T mm	d mm			T04F	T03SMG	T10MG	TL15
	13.0	14.0	1.5	3.2			015189	033193	033194	033195
	20.0	12.0	2.0	4.1			014618		052454	014620
	13.0	16.0	2.0	3.0			017504	031647	031648	031649
	13.0	16.0	2.0	4.0			018566			
	20.0	16.0	2.0	3.0			014631	031650	031651	031652
	20.0	20.0	2.0	4.1			014636	031653	014638	014640
	20.0	24.0	2.0	3.5			014674	031654	031655	031656
	25.0	16.0	2.0	4.1			014776	031657	031658	031659
	25.0	25.0	2.0	4.1			014805	031660	031661	031662
	30.0	20.0	2.0	4.1			014913	031663	031664	031665
	30.0	26.0	2.0	4.1			015020	031666	031667	031668
	40.0	25.0	2.0	4.1			015469	031672	031673	031674

	L mm	W mm	T mm	d mm			T04F	T03SMG	T10MG	TL15
	15.0	15.0	2.0	4.1			014532	031675	031676	031677
	20.0	12.0	2.0	4.1			014619	031678	031679	031680
	20.0	20.0	2.0	4.1			014637	031681	014639	014641
	24.0	22.0	2.0	4.1			018841	031688	031689	031690
	28.0	24.0	2.0	4.1			018842	031692	031693	031694
	30.0	20.0	2.0	4.1			014914	031682	031683	031684
	32.0	24.0	2.0	4.1			018843	031695	031696	031697
	35.0	30.0	2.0	4.1			015328	031685	031686	031687
	36.0	28.0	2.0	4.1			018844	031700	031699	031698

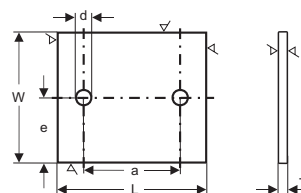
EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



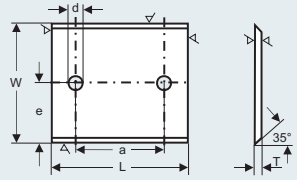
EN With 2 bore holes in the center
 DE Mit 2 Bohrungen mittig
 FR Avec 2 trous au centre
 IT Con 2 fori centrali
 ES Placas con 2 taladros en el centro

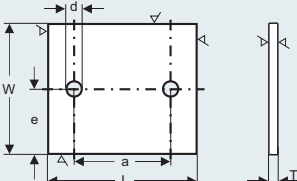
L mm	W mm	T mm	d mm	a mm		T04F	T03SMG	T10MG	TL15
30.0	16.0	2.0	4.0	20.0		014906	031706	014907	031707
30.0	25.0	2.0	3.5	20.0		014956	014958	014962	014965
30.0	25.0	2.0	3.0	20.0		017496	031708	031709	031710
30.0	26.0	2.0	3.5	20.0		015022	031711	031712	031713
30.0	35.0	2.0	4.1	20.0		015098	031714	031715	031716
40.0	16.0	2.0	4.1	26.0		015429	031717	031718	015430
40.0	20.0	2.0	4.1	20.0		015434	015435	031719	031720
40.0	20.0	2.0	4.1	26.0		015436	015437	031721	031722
40.0	25.0	2.0	4.1	20.0		015473	031723	031724	031725
40.0	25.0	2.0	4.1	26.0		015475	015476	031726	031727
40.0	30.0	2.0	3.5	20.0		015518	015521	015523	015526
40.0	30.0	2.0	4.1	20.0		015530	031728	031729	031730
40.0	30.0	2.0	4.1	26.0		015529	031731	031732	031733
40.0	32.62	2.0	3.5	20.0		015583	031734	031735	015587
40.0	35.0	2.0	4.1	20.0		015590	031736	031737	015592
40.0	35.0	2.0	4.1	26.0		015595	015596	015600	015603
40.0	37.82	2.0	3.5	20.0		015639	031738	031739	031740
40.0	40.0	2.0	4.1	20.0		015641	031741	031742	031743
40.0	40.0	2.0	3.5	20.0		015643	031744	031745	031746
40.0	42.86	2.0	3.5	20.0		015671	031747	031748	031749
45.0	30.0	2.0	4.1	26.0		015781	031750	031751	031752
50.0	16.0	2.0	4.1	26.0		015788	015789	031753	031754
50.0	20.0	2.0	4.1	26.0		015800	031755	031756	031757
50.0	25.0	2.0	4.1	26.0		015838	031758	031759	015836
50.0	30.0	2.0	4.1	26.0		015867	031760	031761	031762
50.0	45.0	2.0	4.1	34.0		015931	015933	015935	031766

EN Blanks for profiling
DE Blanketts zum Profilieren
FR Plaquettes à profiler
IT Placchette da profilare
ES Placas para perfilar

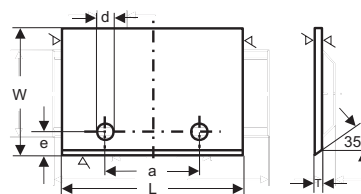


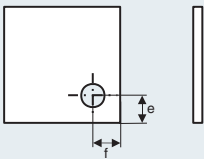
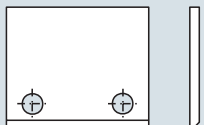
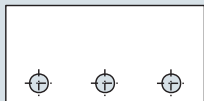
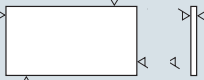
EN With 2 bore holes in the center
DE Mit 2 Bohrungen mittig
FR Avec 2 trous au centre
IT Con 2 fori centrali
ES Placas con 2 taladros en el centro

	L mm	W mm	T mm	d mm	a mm		T04F	T03SMG	T10MG	TL15
	60.0	20.0	2.0	4.1	26.0		015992	031770	015995	015996
	60.0	25.0	2.0	4.1	26.0		016022	031771	031772	016024
	60.0	24.0	2.0	4.1	36.0		016027	031773	031774	031775
	60.0	32.62	2.0	3.5	20.0		016089	031776	031777	031778
	60.0	35.0	2.0	4.1	26.0		016091	016092	031779	016095
	60.0	35.0	2.0	4.1	44.0		016098	016102	016104	016107
	60.0	37.82	2.0	3.5	20.0		016137	031780	031781	031782
	60.0	39.0	2.0	3.5	20.0		016138	031783	031784	016140
	60.0	40.0	2.0	4.1	44.0		016145	016148	016149	016151
	60.0	42.86	2.0	3.5	20.0		016184	031785	031786	031787
	80.0	24.0	2.0	4.1	60.0		016265			
	80.0	45.0	2.5	4.1	60.0		016317	016318	031794	031795

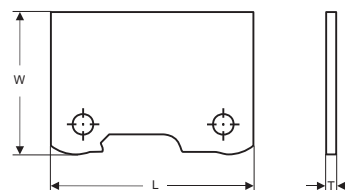
	L mm	W mm	T mm	d mm	a mm		T04F	T03SMG	T10MG	TL15
	30.0	25.0	2.0	4.1	14.0		014957	031798	031799	031800
	30.0	30.0	2.0	4.1	14.0		015035	031801	031802	031803
	30.0	35.0	2.0	4.1	14.0		015099	031804	031805	031806
	40.0	30.0	2.0	4.1	26.0		015519	031807	031808	031809
	50.0	40.0	2.0	4.1	26.0		015913	031822	031823	031824
	60.0	30.0	2.0	4.1	26.0		016061	016062	031825	031826
	60.0	40.0	2.0	4.1	26.0		016147	031827	016150	031828

EN Special blanks for profiling
 DE Spezial-Blanketts zum Profilieren
 FR Plaquettes spéciales à profiler
 IT Placchette speciali da profilare
 ES Placas especiales para perfilar

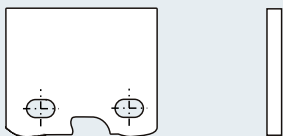
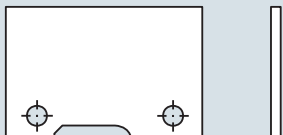
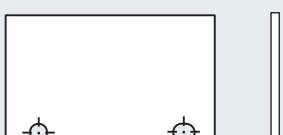
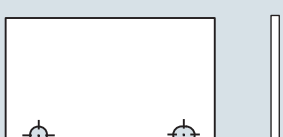


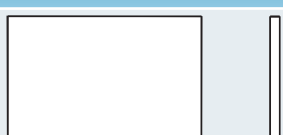
	L mm	W mm	T mm	d mm	a mm	e mm	f mm	T04F
	20.4	20.4	1.5	4.2		6.3	6.3	019915
	20.4	27.6	1.5	4.2		6.3	6.3	019916
	20.5	20.5	2.0	5.0		5.0	5.0	018084
	25.5	20.5	2.0	5.0		6.0	6.0	018434
	25.5	25.0	2.0	5.0		6.0	6.0	018546
	25.5	25.5	2.0	5.0		6.0	6.0	018086
	28.0	32.2	2.0	5.0		6.0	6.0	018536
	40.0	50.2	2.0	4.5x7.0	27.0	7.5		035289
	40.0	60.2	2.0	4.5x7.0	27.0	7.5		019068
	60.0	25.2	2.0	7.0x4.5	45.5	6.3		037415
	60.0	30.2	2.0	7.0x4.5	45.5	6.3		035292
	60.0	40.2	2.0	7.0x4.5	45.5	6.3		035293
	30.0	25.0	2.0	4.1	19.0	4.6		018068
	30.0	27.0	2.0	4.1	19.0	4.6		018467
	30.0	40.5	2.0	4.1	19.0	4.5		018602
	35.0	27.0	2.0	4.1	19.0	4.6		018074
	40.0	27.5	2.0	4.1	27.5	4.6		018367
	40.0	27.5	2.0	4.1	19.0	4.6		018453
	40.0	40.5	2.0	4.1	19.0	4.6		018605
	50.0	20.5	2.0	4.1	26.0	6.0		019113
	50.0	27.5	2.0	4.1	26.0	4.6		018364
	50.0	27.5	2.0	4.1	26.0	6.0		018277
	36.0	21.0	2.0	4.4				017583
	60.0	30.4	2.0	5.6	20.0	7.0		019162
	60.0	35.4	2.0	5.6	20.0	7.0		019472
	60.0	40.4	2.0	5.6	20.0	7.0		019163
	80.0	30.4	2.0	5.6	20.0	7.0		019164
	80.0	35.4	2.0	5.6	20.0	7.0		019473
	80.0	40.4	2.0	5.6	20.0	7.0		019165
	80.0	27.0	2.0	4.1	67.0			032388
	37.5	25.4	1.5					019140
	50.0	25.4	1.5					018343

EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



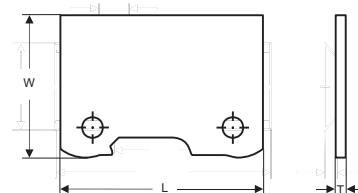
For Leuco Superprofiler System*

	L mm	W mm	T mm	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
	31.0	26.0	1.5	015207	015210	106725	015211	015214
	41.0	28.0	1.5	015701	015708	102763	015722	015727
	41.0	28.0	2.0	015695	031835	106726	031837	031839
	41.0	35.0	1.5	015748	015750	106727	015751	015753
	41.0	35.0	2.0	015744	031840	106728	015745	015746
	51.0	35.0	1.5	015973	031841	106729	015975	015978
	51.0	45.0	2.0	015981	015984	106730	031842	031843
	60.8	30.6	1.5	016209	016214	106731	016225	016229
	60.8	30.6	2.0	016206	031844	106732	031846	016208
	61.0	45.0	2.0	016234	016238	106733	016239	016242
	81.0	45.0	2.0	016334	031847	106734	016336	016339

	L mm	W mm	T mm	d mm	e mm	T04F	T03SMG	T04MG-CR (T08CR)	T10MG	TL15
	40.4	41.2	2.0	4.1	6.0	015756		106735		
	40.4	41.2	2.0	5.1	8.0	033424	053741	106736	033503	042598

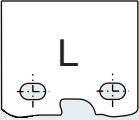
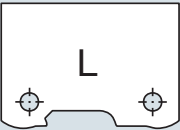
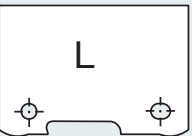
* EN For use in Leuco-cutterheads only
 * DE Nur zur Verwendung in Messerköpfen der Firma Leuco
 * FR Utilisation limitée aux porte outils de l'entreprise Leuco
 * IT Da usare solo su teste portacottelli della Leuco
 * ES Sólo para empleo con portacuchillas de la firma Leuco

EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



For Leuco Superprofiler System*

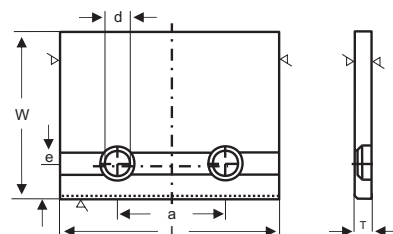
>>> MICROFINISH <<<

		L mm	W mm	T mm	T04F	T03SMG	T10MG	TL15
	L	31.0	26.0	1.5	032077	032076	015212	032074
	R	31.0	26.0	1.5	015208	032072	015213	032073
	L	41.0	28.0	1.5	015707	015711	015724	015730
	R	41.0	28.0	1.5	015702	015709	015723	015728
	L	41.0	28.0	2.0	031848	031849	031852	031854
	R	41.0	28.0	2.0	015696	031850	031853	031855
	L	41.0	35.0	1.5	032028	032029	032027	032030
	R	41.0	35.0	1.5	032031	032032	015752	032033
	L	41.0	35.0	2.0	032034	032037	032038	032041
	R	41.0	35.0	2.0	032035	032036	032039	032040
	L	51.0	35.0	1.5	034084	034085	034086	034087
	R	51.0	35.0	1.5	032043	032044	032045	032046
	L	51.0	45.0	2.0	034088	034089	034090	034091
	R	51.0	45.0	2.0	015982	032047	032048	032049
	L	60.8	30.6	1.5	032051	032053	032054	032055
	R	60.8	30.6	1.5	032050	032052	016226	032056
	L	60.8	30.6	2.0	032058	032059	032063	032062
	R	60.8	30.6	2.0	032057	032060	032064	032061
	L	61.0	45.0	2.0	034092	034093	034094	034095
	R	61.0	45.0	2.0	016235	032065	032066	016243
	L	81.0	45.0	2.0	034096	034097	034098	034099
	R	81.0	45.0	2.0	032067	032068	032069	032070

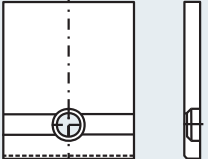
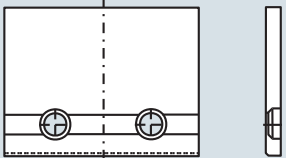
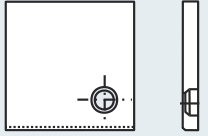
L: Left, links, gauche, sinistra, izquierda
 R: Right, rechts, droite, destra, derecha

* EN For use in Leuco-cutterheads only
 * DE Nur zur Verwendung in Messerköpfen der Firma Leuco
 * FR Utilisation limitée aux porte outils de l'entreprise Leuco
 * IT Da usare solo su teste portacottelli della Leuco
 * ES Sólo para empleo con portacuchillas de la firma Leuco

EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



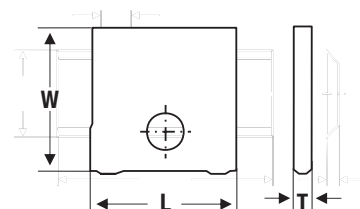
For Freud System*

	L mm	W mm	T mm	d mm	a mm	e mm	T10MG
	20.0	25.0	3.0	4.5		7.0	031880
	25.0	25.0	3.0	4.5		7.0	031884
	25.0	30.0	3.0	4.5		7.0	031887
	25.0	35.0	3.0	4.5		7.0	031890
	25.0	40.0	3.0	4.5		7.0	031893
	30.0	40.0	3.0	4.5		7.0	031959
	35.0	25.0	3.0	4.5		7.0	031897
	35.0	30.0	3.0	4.5		7.0	031901
	35.0	35.0	3.0	4.5		7.0	031904
	45.0	25.0	3.0	4.5	28.0	7.0	031908
	45.0	30.0	3.0	4.5	28.0	7.0	031912
	45.0	35.0	3.0	4.5	28.0	7.0	031916
	55.0	25.0	3.0	4.5	41.0	6.0	031920
	55.0	30.0	3.0	4.5	41.0	6.0	031923
	55.0	35.0	3.0	4.5	41.0	6.0	031928
	55.0	40.0	3.0	4.5	41.0	6.0	031932
	65.0	20.0	3.0	4.5	28.0	6.0	031936
	65.0	25.0	3.0	4.5	28.0	6.0	018826
	70.0	25.0	3.0	4.5	41.0	6.0	031940
	80.0	30.0	3.0	4.5	66.0	6.0	031944
	80.0	35.0	3.0	4.5	66.0	6.0	031948
	40.0	40.0	3.0	4.5		11/11	031952

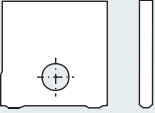
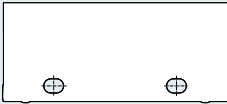
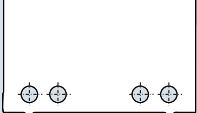
EN Other grades available upon request!
 DE Andere Sorten auf Anfrage erhältlich!
 FR Autres nuances disponibles sur demande!
 IT Altre gradazioni disponibili su richiesta!
 ES Otros grados disponibles a petición!

* EN For use in Freud-cutterheads only
 * DE Nur zur Verwendung in Messerköpfen der Firma Freud
 * FR Utilisation limitée aux porte outils de l'entreprise Freud
 * IT Da usare solo su teste portacoltelli della Freud
 * ES Sólo para empleo con portacuchillas de la firma Freud

EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



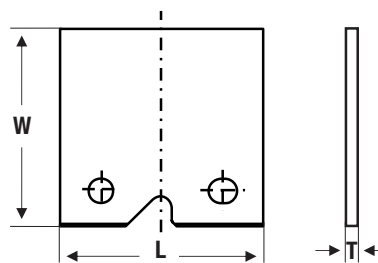
For Leuco ECO-PRO System*

	L mm	W mm	T mm	T04F	T03SMG	T10MG	TL15
	10.6	20.8	2.0	032288	032343	032344	032345
	12.5	20.5	2.0	032346	032385	032386	032387
	15.5	20.5	2.0	032347	032390	032456	032495
	15.5	25.5	2.0	032352	032393	032457	032496
	16.4	20.5	2.0	032353	032406	032458	032497
	16.7	25.9	2.0	032354	032408	032459	032498
	18.4	18.9	2.0	032355	032409	032460	032499
	18.4	25.9	2.0	032356	032410	032461	032500
	18.4	36.3	2.0	032357	032412	032462	032501
	20.3	20.5	2.0	032358	032421	032463	032502
	20.3	25.5	2.0	032359	032423	032464	032503
	20.3	30.4	2.0	032360	032425	032465	032504
	22.3	25.5	2.0	032361	032433	032466	032505
	24.3	20.9	2.0	032362	032434	032467	032506
	25.3	25.9	2.0	032363	032435	032468	032507
	25.3	35.3	2.0	032364	032436	032469	032508
	28.2	25.5	2.0	032365	032437	032470	032509
	28.2	35.3	2.0	032366	032438	032471	032511
	L mm	W mm	T mm	T04F	T03SMG	T10MG	TL15
	30.2	25.5	2.0	032348	032349	032350	032351
	30.2	30.4	2.0	032367	032439	032478	032523
	32.2	22.8	2.0	032368	032440	032479	032524
	32.2	35.4	2.0	032369	032441	032480	032525
	32.8	26.0	2.0	032370	032442	032481	032526
	35.2	26.0	2.0	032371	032443	032482	032527
	40.1	20.9	2.0	032372	032444	032483	032528
	40.1	30.4	2.0	032373	032445	032484	032529
	40.8	36.0	2.0	032374	032446	032485	032530
	42.8	31.0	2.0	032375	032447	032486	032531
	42.8	36.0	2.0	032376	032448	032487	032532
	45.8	36.0	2.0	032377	032449	032488	032533
	49.9	20.9	2.0	032378	032450	032489	032534
	49.9	33.0	2.0	032379	032451	032490	032535
	49.9	40.2	2.0	032380	032452	032491	032536
	60.6	25.8	2.0	032382	032454	032493	032538
	80.6	35.8	2.0	032384	032455	032494	032539
	59.6	35.4	2.0	032381	032453	032492	032537

* EN For use in Leuco-cutterheads only
 * DE Nur zur Verwendung in Messerköpfen der Firma Leuco
 * FR Utilisation limitée aux porte outils de l'entreprise Leuco
 * IT Da usare solo su teste portacoltelli della Leuco
 * ES Sólo para empleo con portacuchillas de la firma Leuco

EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar

Also available with Microfinish!
 Auch mit Microfinish erhältlich!



For Oertli System*

	L mm	W mm	T mm	T04F	T10MG
	20.0	20.3	2.0	032078	032080
	20.0	24.3	2.0	022563	022565
	20.0	29.3	2.0	022567	022568
	20.0	34.3	2.0	032083	022571
	25.0	19.3	2.0	032085	032086
	25.0	24.3	2.0	022577	022578
	25.0	29.3	2.0	022581	022583
	25.0	34.3	2.0	022558	022559
	30.0	19.3	2.0	032098	032100
	30.0	24.3	2.0	022586	032093
	30.0	29.3	2.0	032094	032095
	30.0	34.3	2.0	022611	022612
	35.0	24.3	2.0	022588	022589
	35.0	29.3	2.0	022592	022594
	35.0	34.3	2.0	032103	032104
	45.0	19.3	2.0	022575	022576
	45.0	24.3	2.0	022596	022597
	45.0	29.3	2.0	022600	022602
	45.0	33.3	2.0	032108	022604
	45.0	34.3	2.0	032110	032111
	55.0	19.3	2.0	032116	032118
	55.0	22.3	2.0	032113	035199
	55.0	27.8	2.0	032119	032120
	55.0	29.3	2.0	032122	035204
	55.0	33.3	2.0	022605	022606
	65.0	22.3	2.0	032125	032126
	65.0	27.8	2.0	032128	032130
	65.0	33.3	2.0	022609	032131
	80.0	22.3	2.0	032133	032134
	80.0	27.8	2.0	032136	032137
	80.0	33.3	2.0	032141	032140
	25.0	29.0-50°	2.0	022617	022620
	25.0	29.0-70°	2.0	022624	022628
	35.0	29.0-50°	2.0	032142	032143
	35.0	29.0-70°	2.0	032145	032146

* EN For use in Oertli-cutterheads only

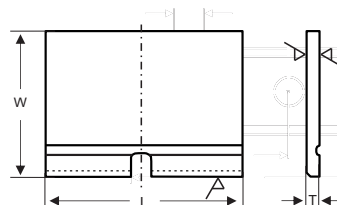
* DE Nur zur Verwendung in Messerköpfen der Firma Oertli

* FR Utilisation limitée aux porte outils de l'entreprise Oertli

* IT Da usare solo su teste portacottelli della Oertli

* ES Sólo para empleo con portacuchillas de la firma Oertli

EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



EN Face side polished
 DE Brustseite poliert
 FR Face polie
 IT Lappatura sul petto
 ES Acabado pulido en la cara

For System Proficut*

L mm	W mm	T mm	T04F	T10MG	New! MAGNOL Coating technology
15.5	14.5	2.0	130066	130567	130568
15.5	16.5	2.0	130125	130124	130569
15.5	22.5	2.0	130122	130123	130570
20.5	16.5	2.0	032168	129131	129674
20.5	22.5	2.0	032171	038011	129813
20.5	25.5	2.0	023036	129132	129814
20.5	27.9	2.0	032174	023039	129815
20.5	30.6	2.0	032176	129133	129816
20.5	32.6	2.0	032178	129134	129817
20.5	34.0	2.0	032180	129135	129818
25.5	16.5	2.0	032183	129136	129819
25.5	22.5	2.0	032186	129137	129820
25.5	25.5	2.0	032189	129138	129821
25.5	27.9	2.0	032191	129139	129822
25.5	30.6	2.0	032194	129140	129823
25.5	32.6	2.0	032198	129141	129824
25.5	34.0	2.0	032201	129142	129825
30.5	16.5	2.0	032204	129143	129826
30.5	22.5	2.0	032206	129144	129827
30.5	25.5	2.0	032209	129145	129828
30.5	27.9	2.0	032212	023057	129829
30.5	30.6	2.0	032216	129146	129830
30.5	32.6	2.0	032220	129147	129831
30.5	34.0	2.0	032222	129148	129832
35.5	16.5	2.0	129697	129698	129872
35.5	22.5	2.0	129226	129222	129833
35.5	25.5	2.0	129227	129223	129834
35.5	32.5	2.0	129228	129225	129835
40.25	16.5	2.0	032225	129149	129836
40.25	22.5	2.0	032228	129150	129837
40.25	25.5	2.0	032230	129151	129838
40.25	27.9	2.0	032232	129152	129839
40.25	30.6	2.0	032234	129153	129840
40.25	32.6	2.0	032236	129155	129841
40.25	34.0	2.0	032238	129156	129842
50.25	22.5	2.0	032241	129157	129843
50.25	25.5	2.0	032243	129158	129844
50.25	27.9	2.0	032245	129159	129845
50.25	30.6	2.0	032247	129160	129846
50.25	32.6	2.0	032250	129161	129847
50.25	34.0	2.0	032251	129162	129848

* EN For use in Leitz-cutterheads only

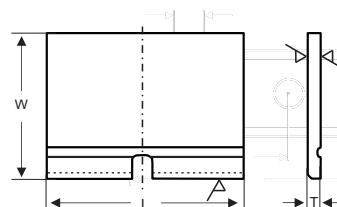
* DE Nur zur Verwendung in Messerköpfen der Firma Leitz

* FR Utilisation limitée aux porte outils de l'entreprise Leitz

* IT Da usare solo su teste portacoltelli della Leitz

* ES Sólo para empleo con portacuchillas de la firma Leitz

EN Blanks for profiling
 DE Blanketts zum Profilieren
 FR Plaquettes à profiler
 IT Placchette da profilare
 ES Placas para perfilar



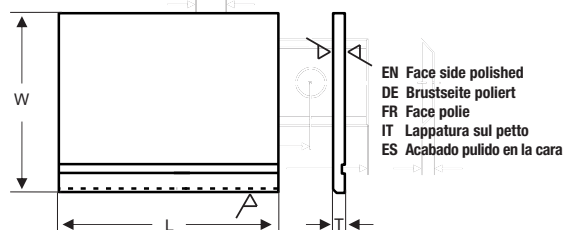
EN Face side polished
 DE Brustseite poliert
 FR Face polie
 IT Lappatura sul petto
 ES Acabado pulido en la cara

For System Profilcut*

L mm	W mm	T mm	T04F	T10MG	New! Meo-Plus Measuring technology
60.25	22.5	2.0	032254	129163	129849
60.25	25.5	2.0	032256	129166	129850
60.25	27.9	2.0	032258	129167	129851
60.25	30.6	2.0	032260	129168	129852
60.25	32.6	2.0	032262	129170	129853
60.25	34.0	2.0	032264	129171	129854
80.25	16.5	2.0	129218	129217	129858
80.25	22.5	2.0	032267	129172	129859
80.25	25.5	2.0	032270	129173	129860
80.25	27.9	2.0	032273	129174	129861
80.25	30.6	2.0	032276	129175	129862
80.25	32.6	2.0	032279	129176	129863
80.25	34.0	2.0	032282	129177	129864

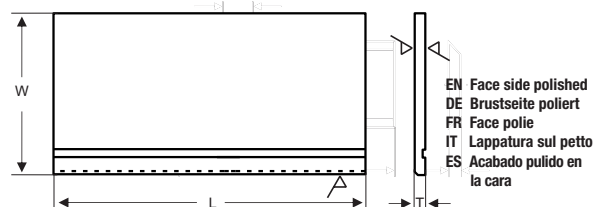
* EN For use in Leitz-cutterheads only
 * DE Nur zur Verwendung in Messerköpfen der Firma Leitz
 * FR Utilisation limitée aux porte outils de l'entreprise Leitz
 * IT Da usare solo su teste portacoltelli della Leitz
 * ES Sólo para empleo con portacuchillas de la firma Leitz

- EN Knives with crossgroove and microfinish
 DE Blanketts mit Quernut und Microfinish
 FR Plaquettes avec rainure transversale et microfinish
 IT Placchette con scanalatura e microfinish
 ES Placas con ranura transversal y microfinish



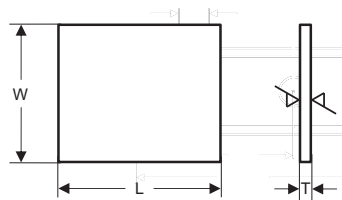
L mm	W mm	T mm	T04F	T10MG
20.5	16.5	2.0	037193	038523
20.5	22.5	2.0	037996	022939
20.5	25.5	2.0	041099	022943
20.5	27.9	2.0	041102	022946
20.5	30.6	2.0	041103	022949
20.5	34.0	2.0	041108	041110
25.5	25.5	2.0	041204	041206
25.5	27.9	2.0	041209	041207
25.5	30.6	2.0	041210	041212
25.5	34.0	2.0	041217	041219
30.5	22.5	2.0	036089	022957
30.5	25.5	2.0	041112	022960
30.5	27.9	2.0	041121	022962
30.5	30.6	2.0	041122	022965
30.5	34.0	2.0	041127	041128
35.5	22.5	2.0	041522	041524
35.5	25.5	2.0	041526	041527
35.5	32.5	2.0	041529	041530
40.25	16.5	2.0	040673	041130
40.25	22.5	2.0	041131	022973
40.25	25.5	2.0	041133	022976
40.25	27.9	2.0	041135	022979
40.25	30.6	2.0	041138	022983
40.25	32.6	2.0	041139	022986
40.25	34.0	2.0	039717	041142
50.25	22.5	2.0	039716	022990
50.25	25.5	2.0	041145	022993
50.25	27.9	2.0	040864	022996
50.25	30.6	2.0	041149	022999
50.25	32.6	2.0	041150	023002
50.25	34.0	2.0	041152	041153
60.25	22.5	2.0	041158	023007
60.25	25.5	2.0	037638	023010
60.25	27.9	2.0	036846	023012
60.25	30.6	2.0	041162	023015
60.25	32.6	2.0	041166	023017
80.25	16.5	2.0	041172	041173

- EN Knives with crossgroove and microfinish
 DE Blanketts mit Quernut und Microfinish
 FR Plaquettes avec rainure transversale et microfinish
 IT Placchette con scanalatura e microfinish
 ES Placas con ranura transversal y microfinish



L	W	T	T04F	T10MG
mm	mm	mm		
165.0	16.5	2.0	032154	041225
165.0	22.5	2.0	032162	041226
165.0	25.5	2.0	032163	041227
165.0	27.9	2.0	032164	041228
165.0	30.6	2.0	032165	041229
165.0	32.6	2.0	032166	041230
165.0	34.0	2.0	032167	041231

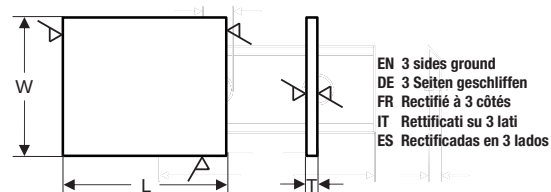
- EN Blanks for profiling - Without bores
 DE Blanketts zum Profilieren - Ohne Bohrung
 FR Plaquettes à profiler - Sans trous
 IT Placchette da profilare - Senza fori
 ES Placas para perfilar - Sin taladros



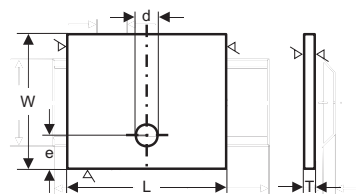
EN Thickness ground
 DE Plangeschliffen
 FR Rectifié à l'épaisseur
 IT Rettifica sui piani
 ES Rectificadas al grosor

L mm	W mm	T mm	T04F	T03SMG	T10MG	TL15
30.0	15.0	2.0	018644	018643	018646	031856
40.0	15.0	2.0	018651	018650	018653	018654
40.0	20.0	2.0	018628	031857	018630	018631
40.0	25.0	2.0	018620	031858	018621	031859
40.0	30.0	2.0	018633	018632	031860	018635
40.0	35.0	2.0	018623	018622	018624	031861
48.0	15.0	2.0	018655	031863	018656	031862
48.0	20.0	2.0	018636	031864	018638	018639
48.0	25.0	2.0	018640	018641	018642	031865
50.0	45.0	2.0	018659	018660	018661	031866
50.0	25.4	1.5	018343	031867	031868	031869
60.0	20.0	2.0	018626	031870	031871	031872
60.0	40.0	2.0	018664	018663	018665	031875
80.0	35.0	2.0	018658	031876	031877	031878

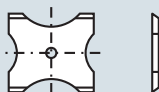
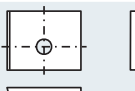
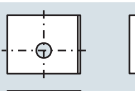
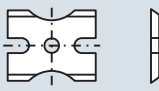
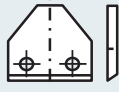
EN	Blanks for profiling	- Without bores
DE	Blanketts zum Profilieren	- Ohne Bohrung
FR	Plaquettes à profiler	- Sans trous
IT	Placchette da profilare	- Senza fori
ES	Placas para perfilar	- Sin taladros

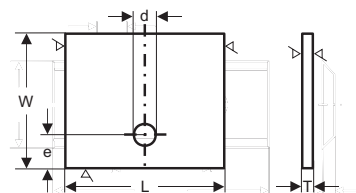


L mm	W mm	T mm	T04F	T04MG-CR (T08CR)	T10MG
15.0	15.5	2.0	107714	107755	107795
15.0	20.5	2.0	107715	107756	107796
20.0	20.5	2.0	107717	107757	107797
20.0	25.5	2.0	107718	107758	107798
20.0	30.5	2.0	107719	107759	107799
20.0	35.5	2.0	107720	107760	107800
25.0	20.5	2.0	107721	107761	107801
25.0	25.5	2.0	107722	107762	107802
25.0	30.5	2.0	107723	107763	107803
25.0	35.5	2.0	107724	107764	107804
30.0	20.5	2.0	107725	107765	107805
30.0	25.5	2.0	107726	107766	107806
30.0	30.5	2.0	107727	107767	107807
30.0	35.5	2.0	107728	107768	107808
30.0	40.5	2.0	107729	107769	107809
35.0	20.5	2.0	107730	107770	107810
35.0	25.5	2.0	107731	107771	107811
35.0	30.5	2.0	107732	107772	107812
35.0	35.5	2.0	107733	107773	107813
35.0	40.5	2.0	107734	107774	107814
40.0	20.5	2.0	107735	107775	107815
40.0	25.5	2.0	107736	107776	107816
40.0	30.5	2.0	107737	107777	107817
40.0	35.5	2.0	107738	107778	107818
40.0	40.5	2.0	107739	107779	107819
45.0	30.5	2.0	107740	107780	107820
45.0	35.5	2.0	107741	107781	107821
50.0	20.5	2.0	107742	107782	107822
50.0	25.5	2.0	107743	107783	107823
50.0	30.5	2.0	107744	107784	107824
50.0	35.5	2.0	107745	107785	107826
50.0	40.5	2.0	107746	107786	107827
60.0	20.5	2.0	107747	107787	107828
60.0	25.5	2.0	107748	107788	107829
60.0	30.5	2.0	107749	107789	107830
60.0	40.5	2.0	107750	107790	107831
60.0	45.5	2.0	107751	107791	107832
80.0	25.5	2.0	107752	107792	107833
80.0	35.5	2.0	107753	107793	107835
80.0	45.5	2.0	107754	107794	107836

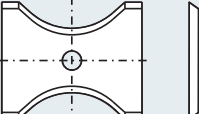


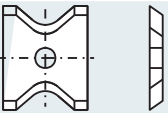
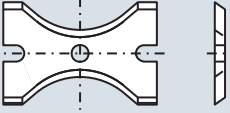
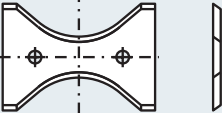
EN Preprofiled blanks
 DE Vorprofilierter Blanketts
 FR Plaquettes préprofilées
 IT Placchette presagomate
 ES Cuchillas preperfiladas

	L	W	T	d	e	R	T04F	T03SMG	T10MG
	mm	mm	mm	mm	mm	mm			
	13.0	16.0	2.0	3.0		2-4	015176	033175	033176
	13.0	16.0	2.0	4.0		2-4	015177	033178	033179
	20.0	21.0	2.0	3.0		5-8	015180	033181	033182
	20.0	21.0	2.0	4.0		5-8	015181	033184	033185
	26.0	24.0	2.0	3.0		9-13	015183	033187	033188
	26.0	24.0	2.0	4.0		9-13	015185	033190	033191
	12.0	14.5	2.0	4.0	6.0		017731	034072	034073
	12.0	18.0	2.0	4.0	6.0		019815	034075	034076
	12.0	18.0	2.0	5.0	5.5		037116	040950	040952
	19.6	15.5	2.0	4.0	6.0		035156	040942	040947
	19.6	15.5	2.0	4.0	6.0		035157	040943	040945
	13.0	14.0	1.5	3.2		2-4	015189	033193	033194
	20.0	16.0	2.0	3.2		5-8	015191	033203	033204
	26.0	18.0	2.0	3.2		9-13	015193	033206	033207
	30.0	20.0	2.0	3.2		14-16	015195	033213	033214
	16.0	17.5	2.0	3.0	5.0	2-6	017550	034059	034060
	16.0	17.5	2.0	3.5	5.0	2-6	015235	033227	033228
	16.0	17.5	2.0	4.0	5.0	2-6	015242	033233	033234
	16.0	17.5	2.0	4.4	5.0	2-6	051310	051311	051341
	20.0	17.5	2.0	4.0	6.0	2-8	015239	033236	033237
	20.0	20.5	2.0	4.0	6.3	2-6	015245	033239	033240
	16.0	17.5	2.0	4.4	5.4	2-6	015243	033230	033231
	24.0	20.4	2.0	4.2	6.3	2-6	015247		
	15.0	15.0	2.0	4.0	6.0		022306	034081	034082
	16.0	14.6	2.0	5.0	6.0		046698		

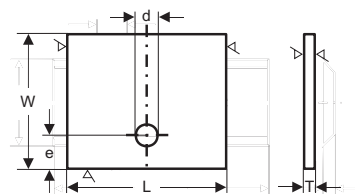


EN Profiled standard blanks
 DE Profilierte Standardblanketts
 FR Plaquettes standard profilées
 IT Placchette profilate standard
 ES Cuchillas perfiladas standard

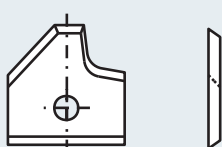
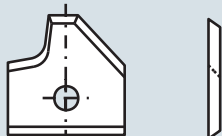
For Leuco system*	L mm	W mm	T mm	d mm	R mm	T04F	T03SMG	T10MG
	13.0	16.0	2.0	4.0	2.0	032836	032876	032904
	13.0	16.0	2.0	4.0	3.0	032837	032877	032909
	13.0	16.0	2.0	4.0	4.0	032838	032878	032908
	20.0	21.0	2.0	4.0	5.0	032839	113392	113397
	20.0	21.0	2.0	4.0	6.0	032840	113393	113398
	20.0	21.0	2.0	4.0	7.0	032841	113394	113399
	20.0	21.0	2.0	4.0	8.0	032842	113395	032915
	26.0	24.0	2.0	4.0	9.0	032843	032882	032919
	26.0	24.0	2.0	4.0	10.0	032844	032883	032920
	26.0	24.0	2.0	4.0	11.0	032845	052559	032921
	26.0	24.0	2.0	4.0	12.0	032846	032885	032922
	26.0	24.0	2.0	4.0	13.0	032847	032886	110692
	30.0	25.0	2.0	4.0	14.0	032848	033782	033783
	30.0	25.0	2.0	4.0	15.0	032849	033785	033786
	30.0	25.0	2.0	4.0	16.0	032850	033788	033789

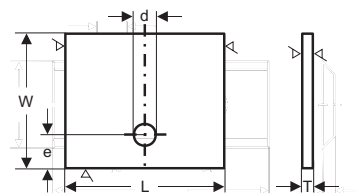
For Howema system*	L mm	W mm	T mm	d mm	R mm	T04F	T03SMG	T10MG
	13.0	14.0	1.5	3.2	2.0	016376	033809	033810
	13.0	14.0	1.5	3.2	3.0	016377	033812	033813
	13.0	14.0	1.5	3.2	4.0	016378	033815	033816
	20.0	16.0	2.0	3.2	5.0	016379	033818	033819
	20.0	16.0	2.0	3.2	6.0	016380	033821	033822
	20.0	16.0	2.0	3.2	7.0	016381	033824	033825
	20.0	16.0	2.0	3.2	8.0	016382	033827	033828
	26.0	18.0	2.0	3.2	9.0	016383	033830	033831
	26.0	18.0	2.0	3.2	10.0	016384	033833	033834
	26.0	18.0	2.0	3.2	11.0	016385	033836	033837
	26.0	18.0	2.0	3.2	12.0	016386	033839	033840
	26.0	18.0	2.0	3.2	12.5	016391	033867	033868
	30.0	20.0	2.0	3.2	13.0	016387	033842	033843
	30.0	20.0	2.0	3.2	14.0	016388	033845	033846
	30.0	20.0	2.0	3.2	15.0	016389	033848	033849
	30.0	20.0	2.0	3.2	16.0	016390	033851	033852
	40.0	28.0	2.0	3.2	17.0	016371	033854	033855
	40.0	28.0	2.0	3.2	18.0	016372	033857	033858
	40.0	28.0	2.0	3.2	19.0	016373	033860	033861
	40.0	28.0	2.0	3.2	20.0	016374	033863	033864

EN * For use in Leuco/Howema-cutterheads only
 DE * Nur zur Verwendung in Messerköpfen der Firma Leuco bzw. Howema
 FR * Utilisation limitée aux porte outils des entreprises Leuco et Howema
 IT * Da usare solo su teste portacoltelli della Leuco - Howema
 ES * Sólo para empleo con portacuchillas de la firma Leuco/Howema

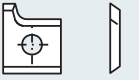


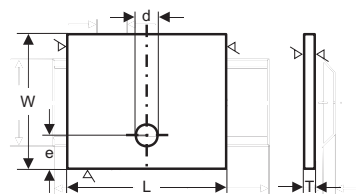
EN Profiled standard blanks
 DE Profilierte Standardblanketts
 FR Plaquettes standard profilées
 IT Placchette profilate standard
 ES Cuchillas perfiladas standard

	L mm	W mm	T mm	d mm	R mm	T04F	T03SMG	T10MG
	12.0	12.0	1.5	4.0	2.0	016426	033022	033024
	12.0	12.0	1.5	4.0	3.0	016427	033021	033025
	12.0	12.0	1.5	4.0	4.0	016428	033023	033026
	12.0	13.0	2.0	4.0	2.0	020990	033877	033878
	12.0	13.0	2.0	4.0	2.5	022185	033874	033875
	12.0	13.0	2.0	4.0	3.0	020853	033871	033872
	16.0	14.0	2.0	4.0	3.0	039045		
	16.0	17.5	2.0	3.0	2.0	016515	033880	033881
	16.0	17.5	2.0	3.0	3.0	016516	033883	033884
	16.0	17.5	2.0	3.0	4.0	016518	033886	033887
	16.0	17.5	2.0	3.0	5.0	016519	033889	033890
	16.0	17.5	2.0	3.5	2.0	016469	033892	033893
	16.0	17.5	2.0	3.5	3.0	016470	033895	033896
	16.0	17.5	2.0	3.5	4.0	016472	033898	033899
	16.0	17.5	2.0	3.5	5.0	016473	033901	033902
	16.0	17.5	2.0	3.5	6.0	016474	033904	033905
	16.0	17.5	2.0	4.0	2.0	016477	032968	032973
	16.0	17.5	2.0	4.0	3.0	016478	032969	032974
	16.0	17.5	2.0	4.0	4.0	016479	032970	032975
	16.0	17.5	2.0	4.0	5.0	016480	032971	032976
	16.0	17.5	2.0	4.4	2.0	016510	033907	033908
	16.0	17.5	2.0	4.4	3.0	016511	033910	033911
	16.0	17.5	2.0	4.4	4.0	016512	033913	033914
	16.0	17.5	2.0	4.4	5.0	016513	033916	033917
	24.0	20.0	2.0	4.4	6.0	033919	033924	033925
	24.0	20.0	2.0	4.4	7.0	033920	033927	033928
	24.0	20.0	2.0	4.4	8.0	033921	033930	033931
	24.0	20.0	2.0	4.4	9.0	033922	033933	033934
	24.0	20.0	2.0	4.4	10.0	033923	033936	033937
	20.0	20.5	2.0	4.0	2.0	016495	032991	032996
	20.0	20.5	2.0	4.0	3.0	016496	032992	032997
	20.0	20.5	2.0	4.0	4.0	016497	032993	032998
	20.0	20.5	2.0	4.0	5.0	016498	032994	032999
	20.0	20.5	2.0	4.0	6.0	016499	032995	033000
	20.0	20.5	2.0	4.0	2.0	016500	033007	033011
	20.0	20.5	2.0	4.0	3.0	016501	033006	033012
	20.0	20.5	2.0	4.0	4.0	016502	033008	033013
	20.0	20.5	2.0	4.0	5.0	016503	033009	033014
	20.0	20.5	2.0	4.0	6.0	016504	033010	033015

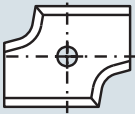


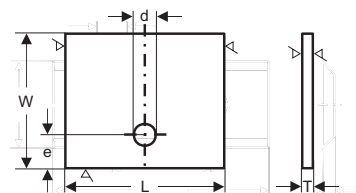
EN Profiled standard blanks
 DE Profilierte Standardblanketts
 FR Plaquettes standard profilées
 IT Placchette profilate standard
 ES Cuchillas perfiladas standard

		L mm	W mm	T mm	d mm	R mm	T04F	T03SMG	T10MG
		15.0	14.5	2.0	4.0	2.0	022305	033941	033942
		15.0	14.5	2.0	4.0	2.5	033939	033947	033948
		15.0	14.5	2.0	4.0	3.0	022308	033953	033954
		16.1	14.0	2.0	5.0	2.0	046693		
		16.1	14.0	2.0	5.0	3.0	049986		
		15.0	14.5	2.0	4.0	2.0	022307	033944	033945
		15.0	14.5	2.0	4.0	2.5	033940	033950	033951
		15.0	14.5	2.0	4.0	3.0	022309	033956	033957
		16.1	14.0	2.0	5.0	2.0	046694		
		16.1	14.0	2.0	5.0	3.0	049987		
		12.0	14.5	2.0	4.0	2.0	021044	033973	033974
		12.0	14.5	2.0	4.0	2.5	020397	034109	034110
		12.0	14.5	2.0	4.0	3.0	020620	034100	034101
		19.6	15.2	2.0	4.0	2.0	033963	033997	033998
		19.6	15.2	2.0	4.0	3.0	033967	034003	034004
		12.0	14.5	2.0	4.0	2.0	021045	033981	033982
		12.0	14.5	2.0	4.0	2.5	020396	034106	034107
		12.0	14.5	2.0	4.0	3.0	020619	034103	034104
		19.6	15.2	2.0	4.0	2.0	033966	034000	034001
		19.6	15.2	2.0	4.0	3.0	033968	034006	034007
 IMA	Quadromat	12.0	18.0	2.0	4.0	2.0	033969	034009	034010
		12.0	18.0	2.0	4.0	3.0	033970	034015	034017
	MFA	12.0	18.0	2.0	4.0	2.0	034024	034037	034038
		12.0	18.0	2.0	4.0	3.0	034031	034040	034041
	Quadromat	12.0	18.0	2.0	4.0	2.0	033971	034012	034013
		12.0	18.0	2.0	4.0	3.0	033972	034019	034020
	MFA	12.0	18.0	2.0	4.0	2.0	034025	041378	041379
		12.0	18.0	2.0	4.0	3.0	034032	040440	041381

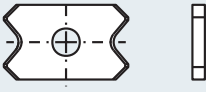
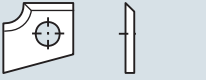
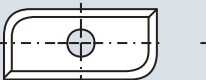
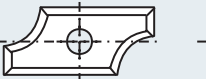


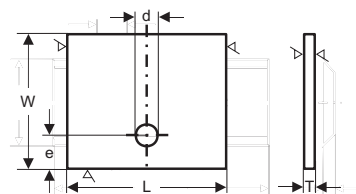
EN Profiled standard blanks
DE Profilierte Standardblanketts
FR Plaquettes standard profilées
IT Placchette profilate standard
ES Cuchillas perfiladas standard

	L	W	T	d	a	R	T04F	T03SMG	T10MG
	mm	mm	mm	mm	mm	mm			
	20.8	15.0	2.0	4.0	12.0	2.0	016429	033565	033566
	20.8	15.0	2.0	4.0	12.0	3.0	016430	033568	033569
	20.8	15.0	2.0	4.0	12.0	4.0	016431	033571	033572
	30.0	17.0	2.0	4.0	20.0	5.0	016432	033574	033575
	30.0	17.0	2.0	4.0	20.0	6.0	016433	033577	033578
	30.0	17.0	2.0	4.0	20.0	7.0	016434	033580	033581
	30.0	17.0	2.0	4.0	20.0	8.0	016435	033583	033584
	30.5	16.5	2.0	3.2	20.0	5.0	016452	033595	033596
	30.5	16.5	2.0	3.2	20.0	6.0	016453	033598	033599
	30.5	16.5	2.0	3.2	20.0	7.0	016454	033601	033602
	30.5	16.5	2.0	3.2	20.0	8.0	016455	033604	033605
	20.0	16.0	2.0	3.0		3.0	033311	033607	033608
	30.0	14.0	2.0	4.0		2.0	033312	033610	033611
	30.0	14.0	2.0	4.0		2.5	033313	033613	033614
	30.0	14.0	2.0	4.0		3.0	033314	033616	033617
	20.0	16.0	2.0	3.0		3.0	033315	033619	033620
	30.0	14.0	2.0	4.0		2.0	033316	033622	033623
	30.0	14.0	2.0	4.0		2.5	033317	033625	033626
	30.0	14.0	2.0	4.0		3.0	033318	033628	033629
	12.0	12.0	1.5	4.0		45°	033319	033632	033633
	16.0	17.5	2.0	4.0		45°	032964	032965	032966
	16.0	17.5	2.0	4.4		45°	033324	041057	041058
	16.0	17.5	2.0	3.5		45°	015237	034112	034113
	21.8	19.5	2.0	3.0	12.0	10.0	033670	033674	033675
	21.8	19.5	2.0	3.0	12.0	12.0	033671	033677	033678
	21.5	20.0	2.0	3.0	12.0	9.0	016445	033657	033658
	21.5	20.0	2.0	3.0	12.0	10.0	016446	033660	033661
	21.5	20.0	2.0	3.0	12.0	11.0	016447	033663	033664
	21.5	20.0	2.0	3.0	12.0	12.0	016448	033666	033667
	21.8	19.5	2.0	3.0	12.0	10.0	033672	033680	033681
	21.8	19.5	2.0	3.0	12.0	12.0	033673	033685	033686
	21.5	20.0	2.0	3.0	12.0	9.0	016436	033645	033646
	21.5	20.0	2.0	3.0	12.0	10.0	016437	033648	033649
	21.5	20.0	2.0	3.0	12.0	11.0	016438	033651	033652
	21.5	20.0	2.0	3.0	12.0	12.0	016439	033654	033655

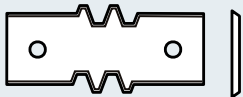
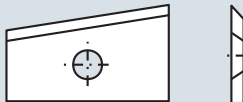
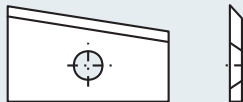


EN Profiled standard blanks
 DE Profilierte Standardblanketts
 FR Plaquettes standard profilées
 IT Placchette profilate standard
 ES Cuchillas perfiladas standard

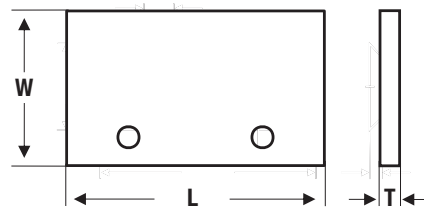
	L mm	W mm	T mm	d mm	R mm	A°	T04F	T03SMG	T06MF
	20.0	12.0	2.0	4.0	1.0	6°	032984	033031	
	20.0	12.0	2.0	4.0	1.0	15°	050309	050310	
	20.0	12.0	2.0	4.0	2.0	6°	016419	033033	
	20.0	12.0	2.0	4.0	2.0	15°	050311	050312	
	20.0	12.0	2.0	4.0	3.0	6°	016420	033034	
	20.0	12.0	2.0	4.0	3.0	15°	050313	050314	
	20.0	12.0	2.0	4.0	4.0	6°	016421	033043	
	20.0	12.0	2.0	4.0	5.0	6°	016422	033042	
	20.0	11.5	2.0	4.5	1.5		050088		
	20.0	11.5	2.0	4.5	2.0		050089		
	20.0	11.5	2.0	4.5	2.5		050090		
	20.0	11.5	2.0	4.5	3.0		050091		
	12.7	12.7	3.2		2.0				035041
	12.7	12.7	3.2		3.0				037922
	15.5	15.2	1.5	4.6	3.0		021377		
	19.5	9.0	1.5	4.0	5x45°		033086	033118	
	19.5	12.0	1.5	4.0	5x45°		034228	034229	
	19.5	9.0	1.5	4.0	5.0		033090	033128	
	19.5	12.0	1.5	4.0	5.0		034232	034233	
	19.5	9.0	1.5	4.0	2.0		033117	033142	
	19.5	9.0	1.5	4.0	3.0		033097	033146	
	19.5	9.0	1.5	4.0	4.0		033098	033149	
	19.5	9.0	1.5	4.0	5.0		033099	033152	
	19.5	12.0	1.5	4.0	2.0		034236	034240	
	19.5	12.0	1.5	4.0	3.0		034237	034243	
	19.5	12.0	1.5	4.0	4.0		034238	034246	
	19.5	12.0	1.5	4.0	5.0		034239	034249	
	39.5	12.0	1.5	4.0			033400	033401	

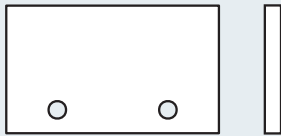


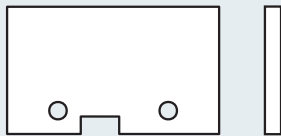
- EN Profiled standard blanks
 DE Profilierte Standardblanketts
 FR Plaquettes standard profilées
 IT Placchette profilate standard
 ES Cuchillas perfiladas standard

	L mm	W mm	T mm	d mm	a mm		T04F
	50.0	21.6	2.0	4.1	26.0		035810
	30.0	22.5	3.0				020272
	55.0	25.0	3.0				020502
	30.0	22.5	3.0				020273
	55.0	25.0	3.0				020503

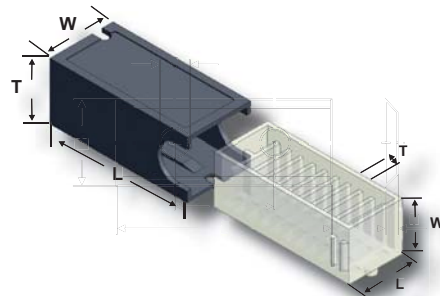
EN Backing plates
 DE Stützplatten
 FR Supports
 IT Supporti
 ES Placas de soporte

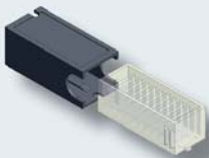
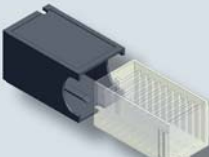
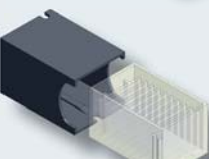
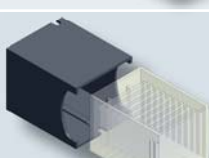
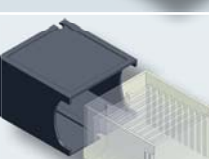
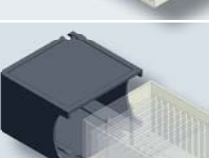
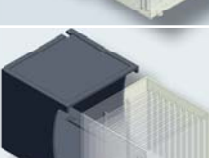


	L mm	W mm	T mm	L W T for Blanks	Art-No.
	38.0	27.0	4.0	40.0 30.0 2.0	015520
	48.0	45.0	4.0	50.0 45.0 2.0	015932
	58.0	32.0	4.0	60.0 35.0 2.0	016100
	58.0	38.0	4.0	60.0 40.0 2.0	016162

	L mm	W mm	T mm	L W T for Superprofiler	Art-No.
	40.0	26.0	4.0	41.0 28.0 1.5	015705
	50.0	33.0	4.0	51.0 35.0 1.5	015974
	60.0	28.0	4.0	61.0 31.0 1.5	016212
	60.0	45.0	6.0	61.0 45.0 2.0	016237
	80.0	43.0	6.0	81.0 45.0 2.0	016335

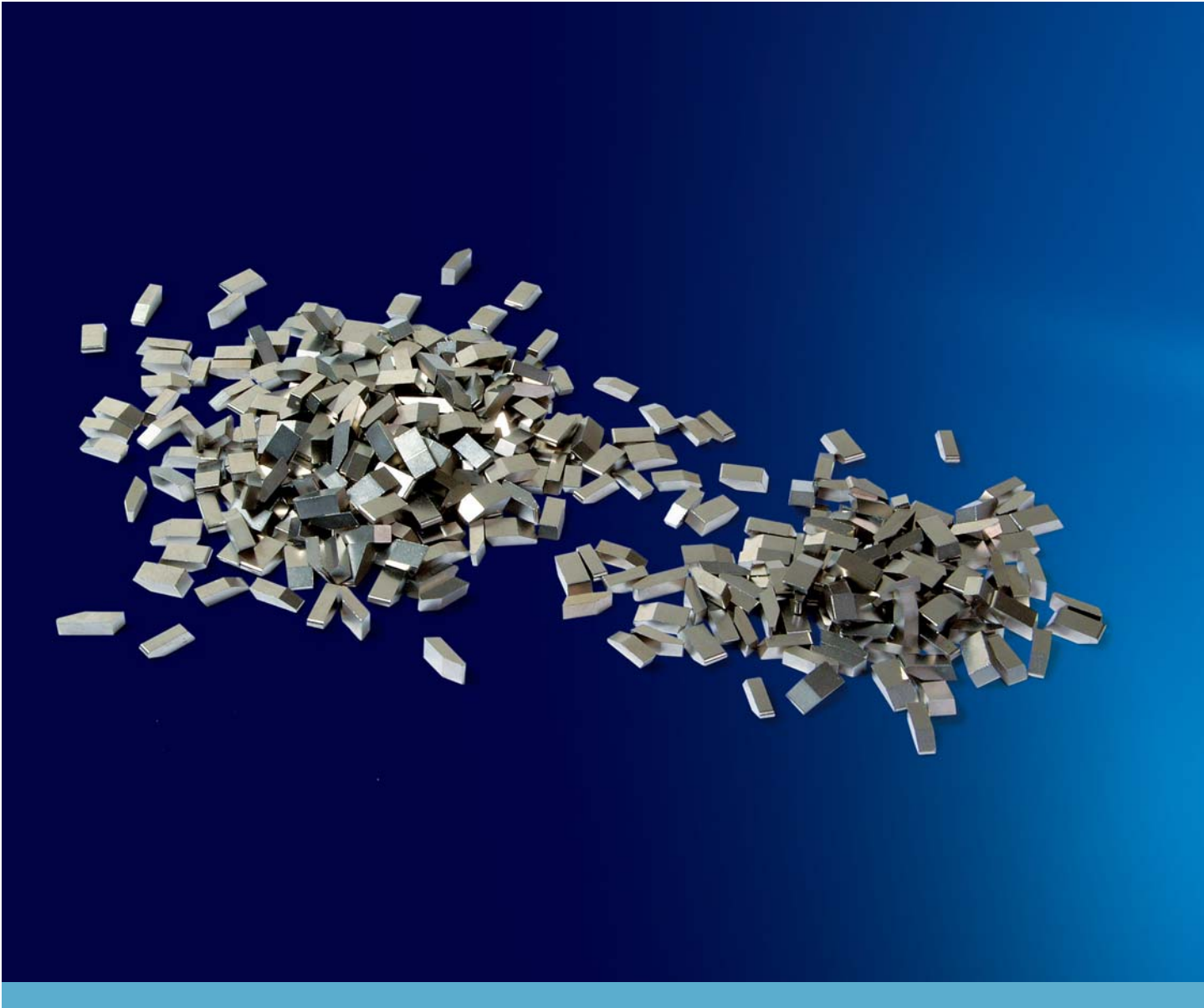
EN Packing boxes
 DE Verpackungsschachteln
 FR Caisses d'emballage
 IT Contenitori per imballo
 ES Cajas de embalaje



EN in anthracite DE in anthrazit FR en anthracite IT in antracite ES en Antracita	External dimension box Außenmaß Schachtel Dimension externe de boîte Dimensione esterna Dimensión externa				Maximum knife dimension Maximales Messermaß Dimension maximum de couteau Dimensione massima della lama Dimensión máxima del cuchillo			Pieces Stück Unités Unità Unidades
	L mm	W mm	T mm	Art-No.	L mm	W mm	T mm	
	69	31.8	29.2	106393	23	23	4	10
	69	41.8	39.2	114845	33	33	4	10
	69	46.8	44.2	106404	38	38	4	10
	69	54.8	52.2	106856	46	46	4	10
	69	61.8	49.2	114844	53	43	4	10
	69	73.6	49.2	114843	65	43	4	10
	69	73.6	71.2	106858	65	65	4	10



TOOLS CUT BETTER WITH TIGRA



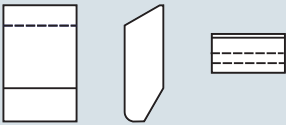
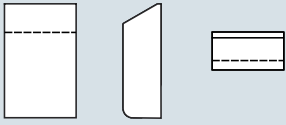
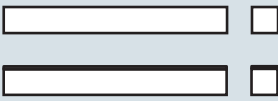


- EN Saw tips and strobe blanks
- DE Sägezähne und Wischerblätter
- FR Dents de scie et racleurs
- IT Dentelli per lame e barrette per rasanti
- ES Dientes de sierra y rasuradores



TOOLS CUT BETTER WITH TIGRA

EN Saw tips and strobe blanks
 DE Sägezähne und Wischerblätter
 FR Dents de scie et racleurs
 IT Dentelli per lame e barrette per rasanti
 ES Dientes de sierra y rasuradores

	EN Carbide saw tips for circular saws DE Hartmetallsägezähne für Kreissägen FR Dents de scie pour scies circulaires IT Dentelli per lame circolari ES Dientes de sierra para sierras circulares	<i>metric metrisch métrique metrico métrico</i>	82-86
	EN Carbide saw tips for circular saws DE Hartmetallsägezähne für Kreissägen FR Dents de scie pour scies circulaires IT Dentelli per lame circolari ES Dientes de sierra para sierras circulares	<i>"CW Style" inch</i>	87 - 91
	EN Carbide saw tips for circular saws DE Hartmetallsägezähne für Kreissägen FR Dents de scie pour scies circulaires IT Dentelli per lame circolari ES Dientes de sierra para sierras circulares	<i>"W Style" inch</i>	92 - 94
	EN Strobe blanks - as sintered and pretinned DE Wischerblätter - roh und lotbeschichtet FR Racleurs - bruts et pre-brasés IT Barrette per rasanti - grezzo e saldo-brasato ES Rasuradores - en bruto y con solda	<i>metric metrisch métrique metrico métrico</i>	95
	EN Strobe blanks for circular saws DE Wischerblätter für Kreissägen FR Racleurs pour scies circulaires IT Barrette per rasanti di lame circolari ES Rasuradores para sierras circulares	<i>inch</i>	96
	EN Brazing alloys and fluxes DE Lot und Flussmittel FR Alliages et flux de brasage IT Leghe brasanti e disossidanti ES Aleaciones y fundentes para soldadura fuerte		97 - 98

EN For sawtips in metalworking grades please refer to our catalog "Metal and composite material working".
 DE Für Sägezähne in Metallbearbeitungssorten beachten Sie bitte unseren Katalog "Metall- und Verbundwerkstoffbearbeitung".
 FR Pour les dents de scie en nuances d'usinage de métaux s.v.p. consultez notre catalogue "Usinage de métaux et de matériaux composites".
 IT Per i dentelli per lame per la meccanica, consultare il nostro catalogo "Lavorazione di metalli e materiali compositi".
 ES Para dientes de sierra en las calidades de metal, consulte nuestro catalogo "Trabajo de metal y de materiales compuestos".

- EN Carbide saw tips - Carbide grades and their applications
 DE Hartmetallsägezähne - Hartmetallsorten und ihre Anwendungen
 FR Dents de scie - Les nuances de carbures et leurs applications
 IT Dentelli per lame - I tipi di metallo duro e le loro applicazioni
 ES Dientes de sierra - Calidades de metal duro y sus aplicaciones

EN	TIGRA grade	ISO	USA	Hardness	Toughness	Bending strength
DE	TIGRA - Sorte	ISO	USA	Härte	Zähigkeit	Biegebruchfestigkeit
FR	Nuance TIGRA	ISO	USA	Dureté	Ténacité	Résistance à la flexion
IT	Tipo TIGRA	ISO	Stati Uniti	Durezza	Tenacità	Resistenza flessionale
ES	Calidad TIGRA	ISO	EE.UU.	Dureza	Tenacidad	Resistencia a la flexión
New!	T03SMG-CR	K01	C4+++	↑	↓	↓
	T03MG-CR* old name: T05CR	K01	C4++	↑	↓	↓
	T03F-CR* old name: T06CR	K01	C4+	↻	↻	↻
	T04F	K05	C4	→	↻	↻
	T06F UNIVERSAL	K10	C3	→	→	→
	T06MF UNIVERSAL	K20	C3	→	↻	→
	T08MF	K30	C2	↻	↑	↻
	T10MG	K10 - K40	C3+	↻	↻	↑
	T12M	> K40	C1	↓	↑	↻
	T15C	> K40	Nail Cut	↓	↑	↑

* EN Special binder
 * D Spezialbinder
 * F Liant spécial

* IT Legante speciale
 * ES Composición especial

EN For technical data, please refer to the pages 4-5.
 DE Die technischen Daten entnehmen Sie bitte den Seiten 4-5.
 FR Pour les données techniques, veuillez voir aux pages 4-5.

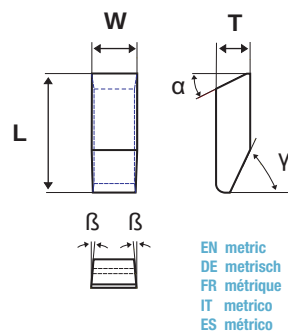
- EN Carbide saw tips - Carbide grades and their applications
DE Hartmetallsägezähne - Hartmetallsorten und ihre Anwendungen
FR Dents de scie - Les nuances de carbures et leurs applications
IT Dentelli per lame - I tipi di metallo duro e le loro applicazioni
ES Dientes de sierra - Calidades de metal duro y sus aplicaciones

Aluminum Aluminium Aluminium Alluminio Aluminio	HDF HDF HDF HDF HDF	MDF MDF MDF MDF MDF	Chipboard Spanplatte Panneaux de particule Truciolare Panel de aglomerado	Hardwood Hartholz Bois dur Legno duro Madera dura	Softwood Weichholz Bois tendre Legno tenero Madera blanda	Main usage Hauptverwendung Usage principal Uso principale Uso principal
						EN HDF, Laminate DE HDF, Laminat FR HDF, stratifié IT HDF, laminato ES HDF, laminado
						EN MDF, HDF DE MDF, HDF FR MDF, HDF IT MDF, HDF ES MDF, HDF
						EN MDF, chipboard, aluminum DE MDF, Spanplatte, Aluminium FR MDF, panneaux, aluminium IT MDF, truciolare, alluminio ES MDF, aglomerado, aluminio
						EN Chipboard, wood DE Spanplatte, Holz FR Panneaux, bois IT Truciolare, legno ES Aglomerado, madera
						EN Universal use DE Universeller Einsatz FR Utilisation universelle IT Uso universale ES Uso universal
						EN Universal use (US) DE Universeller Einsatz (US) FR Utilisation universelle (US) IT Uso universale (US) ES Uso universal (US)
						EN Wood, saw mills DE Holz, Sägewerke FR Bois, scieries IT Legno, segherie ES Madera, aserraderos
						EN Softwood and hardwood DE Weich- und Hartholz FR Bois tendre et dur IT Legni teneri e duri ES Madera blanda y dura
						EN Saw mills, frozen wood DE Sägewerke, gefrorenes Holz FR Scieries, bois congelé IT Segherie, legno congelato ES Fresa-disco, madera congelada
						EN Nail cutting, recycling DE Holz mit Nägeln, Recycling FR Couper ongles, recyclage IT Legno con chiodi, riciclato ES Viruta de madera reciclada

IT Per i dati tecnici, fare riferimento alle pagine 4-5.
ES Para los datos técnicos, consulte las páginas 4-5.

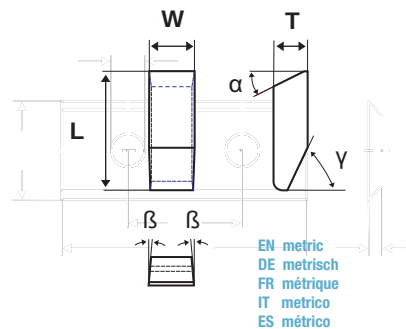
-  best performance
 very good performance
 acceptable
 not suitable

EN Carbide saw tips for circular saws
 DE Hartmetallsägezähne für Kreissägen
 FR Dents de scie pour scies circulaires
 IT Dentelli per lame circolari
 ES Dientes de sierra para sierras circulares



L mm	W mm	T mm	α	β	γ	T03MG-CR (T05CR)	T03F-CR (T06CR)	T06F
6.5	1.8	2.0	27	5	56			120956
6.5	2.0	2.0	27	5	56	128977	111681	111686
6.5	2.2	2.0	27	5	56	126444		126746
6.5	2.4	2.0	27	5	56	126445		
6.5	2.5	2.0	27	5	56		111682	111687
6.5	2.6	2.0	27	5	56	116374		
6.5	2.7	2.0	27	5	56			125016
6.5	3.0	2.0	27	5	56		111683	111688
6.5	3.2	2.0	27	5	56	116373		118303
6.5	3.4	2.0	27	5	56	126259		
6.5	3.5	2.0	27	5	56		111684	111689
6.5	3.8	2.0	27	5	56		111685	111690
6.5	3.9	2.0	27	5	56		123684	
6.5	4.0	2.0	27	5	56			120254
6.5	4.5	2.0	27	5	56			120255

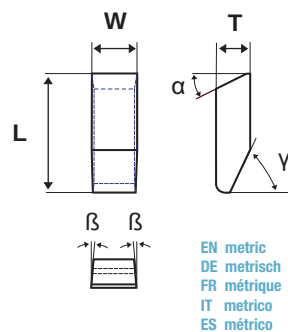
L mm	W mm	T mm	α	β	γ	T03MG-CR (T05CR)	T03F-CR (T06CR)	T04F	T06F
8.0	2.2	2.3	27	5	70	114010	111630	111664	111647
8.0	2.4	2.3	27	5	70	114011	111631	111665	111648
8.0	2.5	2.3	27	5	70	126370	121627	116927	121535
8.0	2.8	2.3	27	5	70	114012	111632	111666	111649
8.0	2.9	2.3	27	5	70	114013	111633	111667	111650
8.0	3.0	2.3	27	5	70	114014	111634	111668	111651
8.0	3.1	2.3	27	5	70	121828	115551	121829	115550
8.0	3.2	2.3	27	5	70				122162
8.0	3.3	2.3	27	5	70	114015	111635	111669	111652
8.0	3.4	2.3	27	5	70	121831	121832	121833	116207
8.0	3.5	2.3	27	5	70	114016	111636	111670	111653
8.0	3.6	2.3	27	5	70	114017	111637	111671	111654
8.0	3.7	2.3	27	5	70			124230	
8.0	3.8	2.3	27	5	70	114018	111638	111672	111655
8.0	4.0	2.3	27	5	70	114019	111639	111673	111656
8.0	4.1	2.3	27	5	70			122470	124214
8.0	4.2	2.3	27	5	70		125953		
8.0	4.3	2.3	27	5	70	114020	111640	111674	111657
8.0	4.4	2.3	27	5	70	114021	111641	111675	111658
8.0	4.5	2.3	27	5	70	114022	111642	111676	111659
8.0	4.6	2.3	27	5	70			117061	122370
8.0	4.8	2.3	27	5	70	114023	111643	111677	111660
8.0	5.0	2.3	27	5	70	114024	111644	111678	111661
8.0	5.2	2.3	27	5	70	114025	111645	111679	111662
8.0	5.5	2.3	27	5	70	114026	111646	111680	111663
8.0	6.0	2.3	27	5	70	124528			



EN Carbide saw tips for circular saws
DE Hartmetallsägezähne für Kreissägen
FR Dents de scie pour scies circulaires
IT Dentelli per lame circolari
ES Dientes de sierra para sierras circulares

L mm	W mm	T mm	α	β	γ	T03MG-CR (T05CR)	T04F	T06F
8.5	2.2	2.5	27	5	70			130208
8.5	2.5	2.5	27	5	70	114027		111621
8.5	2.8	2.5	27	5	70			120048
8.5	3.0	2.5	27	5	70	114028		111622
8.5	3.3	2.5	27	5	70	114029	115664	111623
8.5	3.4	2.5	27	5	70	124609		128510
8.5	3.5	2.5	27	5	70	120964		120961
8.5	3.6	2.5	27	5	70	114030	130238	111624
8.5	3.7	2.5	27	5	70	114031		111625
8.5	3.8	2.5	27	5	70	114032		111626
8.5	4.0	2.5	27	5	70	114033		111627
8.5	4.2	2.5	27	5	70	128976		119323
8.5	4.3	2.5	27	5	70	124204		124694
8.5	4.5	2.5	27	5	70	114034	115662	111628
8.5	4.6	2.5	27	5	70			119324
8.5	4.7	2.5	27	5	70	124206		
8.5	5.0	2.5	27	5	70	114035		111629
8.5	5.5	2.5	27	5	70	120972		120403

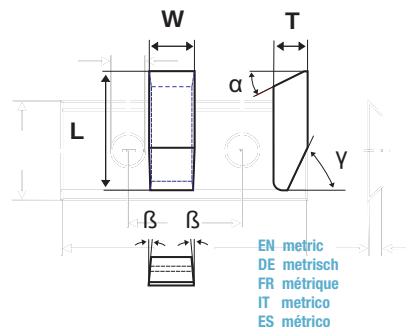
L mm	W mm	T mm	α	β	γ	T03MG-CR (T05CR)	T03F-CR (T06CR)	T04F	T06F
9.0	2.7	2.7	27	5	70				120975
9.0	2.9	2.7	27	5	70				122772
9.0	3.2	2.7	27	5	70				125444
9.0	3.3	2.7	27	5	70	114036	111603	127417	111612
9.0	3.5	2.7	27	5	70	114037	111604		111613
9.0	3.6	2.7	27	5	70	114038	111605		111614
9.0	3.8	2.7	27	5	70	114039	111606		111615
9.0	3.9	2.7	27	5	70	114040	111607		111616
9.0	4.0	2.7	27	5	70	114041	111608		111617
9.0	4.2	2.7	27	5	70	114042	111609		111618
9.0	4.3	2.7	27	5	70	114043	111610		111619
9.0	4.5	2.7	27	5	70				126886
9.0	4.7	2.7	27	5	70	114044	111611		111620
9.0	5.0	2.7	27	5	70				126888
9.0	5.5	2.7	27	5	70				126860



EN Carbide saw tips for circular saws
DE Hartmetallsägezähne für Kreissägen
FR Dents de scie pour scies circulaires
IT Dentelli per lame circolari
ES Dientes de sierra para sierras circulares

L mm	W mm	T mm	α	β	γ	T03MG-CR (T05CR)	T03F-CR (T06CR)	T04F	T06F	
10.5	2.7	2.5	27	5	70	114045	111564	111590	111577	
10.5	3.0	2.5	27	5	70	114046	111565	111591	111578	
10.5	3.3	2.5	27	5	70	114047	112436	112438	112437	
10.5	3.4	2.5	27	5	70	114048	111566	111592	111579	
10.5	3.5	2.5	27	5	70	114049	111567	111593	111580	
10.5	3.6	2.5	27	5	70	114050	111568	111594	111581	
10.5	3.7	2.5	27	5	70	114051	111569	111595	111582	
10.5	3.8	2.5	27	5	70	114052	111570	111596	111583	
10.5	4.0	2.5	27	5	70	114053	111571	111597	111584	
10.5	4.3	2.5	27	5	70	114054	111572	111598	111585	
10.5	4.5	2.5	27	5	70	114055	111573	111599	111586	
10.5	4.6	2.5	27	5	70			122372	119905	
10.5	4.8	2.5	27	5	70				126184	
10.5	5.0	2.5	27	5	70	114056	111574	111600	111587	
10.5	5.5	2.5	27	5	70	114057	111575	111601	111588	
10.5	6.0	2.5	27	5	70	121835	121836	121837	119953	
10.5	6.5	2.5	27	5	70	114058	111576	111602	111589	
L mm	W mm	T mm	α	β	γ	T03MG-CR (T05CR)	T03F-CR (T06CR)	T06MF	T06F	T08MF
10.5	2.5	3.0	27	5	65				122773	
10.5	2.7	3.0	27	5	65				119564	
10.5	2.9	3.0	27	5	65				120976	
10.5	3.0	3.0	27	5	65	114059	111488	111526	111507	111545
10.5	3.1	3.0	27	5	65				120978	
10.5	3.3	3.0	27	5	65				121536	
10.5	3.5	3.0	27	5	65	114060	111489	111527	111508	111546
10.5	3.6	3.0	27	5	65	114061	111490	111528	111509	111547
10.5	3.7	3.0	27	5	65				121538	
10.5	3.8	3.0	27	5	65	114062	111491	111529	111510	111548
10.5	3.9	3.0	27	5	65				121540	
10.5	4.1	3.0	27	5	65	114063	111492	111530	111511	111549
10.5	4.3	3.0	27	5	65	114064	111493	111531	111512	111550
10.5	4.4	3.0	27	5	65		121621			
10.5	4.5	3.0	27	5	65	114065	111494	111532	111513	111551
10.5	4.6	3.0	27	5	65	114066	111495	111533	111514	111552
10.5	4.7	3.0	27	5	65	114067	111496	111534	111515	111553
10.5	4.8	3.0	27	5	65	114068	111497	111535	111516	111554
10.5	5.0	3.0	27	5	65	114069	111498	111536	111517	111555
10.5	5.3	3.0	27	5	65	114070	111499	111537	111518	111556
10.5	5.5	3.0	27	5	65	114071	111500	111538	111519	111557
10.5	5.6	3.0	27	5	65	114072	111501	111539	111520	111558
10.5	6.0	3.0	27	5	65	114073	111502	111540	111521	111559
10.5	6.1	3.0	27	5	65	126806				
10.5	6.5	3.0	27	5	65	114074	111503	111541	111522	111560
10.5	7.0	3.0	27	5	65	114075	111504	111542	111523	111561
10.5	7.5	3.0	27	5	65	124193			118655	
10.5	8.0	3.0	27	5	65				118879	
10.5	8.5	3.0	27	5	65	114076	111505	111543	111524	111562
10.5	10.5	3.0	27	5	65	114077	111506	111544	111525	111563

Note: Also available pretinned! Add "-PT" to part number!

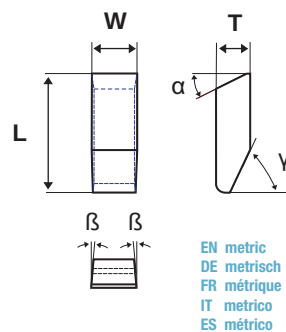


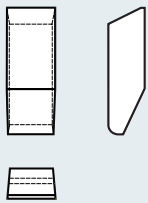
EN Carbide saw tips for circular saws
 DE Hartmetallsägezähne für Kreissägen
 FR Dents de scie pour scies circulaires
 IT Dentelli per lame circolari
 ES Dientes de sierra para sierras circulares

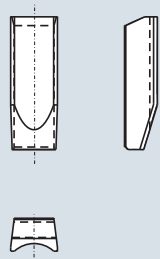
L mm	W mm	T mm	α	β	γ	T03MG-CR (T05CR)	T03F-CR (T06CR)	T06MF	T06F	T08MF
10.5	2.8	3.5	27	5	60				124405	
10.5	3.0	3.5	27	5	60		111428	111468	111448	112413
10.5	3.5	3.5	27	5	60		111429	111469	111449	112414
10.5	3.8	3.5	27	5	60				123824	
10.5	4.0	3.5	27	5	60		111430	111470	111450	112415
10.5	4.1	3.5	27	5	60		111431	111471	111451	112416
10.5	4.3	3.5	27	5	60		111432	111472	111452	112417
10.5	4.5	3.5	27	5	60		111433	111473	111453	112418
10.5	4.7	3.5	27	5	60		111434	111474	111454	112419
10.5	4.8	3.5	27	5	60	122004	111435	111475	111455	112420
10.5	4.9	3.5	27	5	60			125715		
10.5	5.0	3.5	27	5	60	126206	111436	111476	111456	112421
10.5	5.3	3.5	27	5	60	126913	111437	111477	111457	112422
10.5	5.5	3.5	27	5	60	130113	111438	111478	111458	112423
10.5	5.8	3.5	27	5	60		111439	111479	111459	112424
10.5	6.0	3.5	27	5	60	122005	111440	111480	111460	112425
10.5	6.5	3.5	27	5	60		111441	111481	111461	112426
10.5	7.0	3.5	27	5	60		111442	111482	111462	112427
10.5	7.5	3.5	27	5	60		111443	111483	111463	112428
10.5	8.0	3.5	27	5	60		111444	111484	111464	112429
10.5	8.5	3.5	27	5	60		111445	111485	111465	112430
10.5	9.0	3.5	27	5	60		111446	111486	111466	112431
10.5	10.0	3.5	27	5	60		111447	111487	111467	112432
10.5	10.5	3.5	27	5	60				118889	
10.5	11.5	3.5	27	5	60				118891	
L mm	W mm	T mm	α	β	γ	T03MG-CR (T05CR)	T03F-CR (T06CR)	T06MF	T08MF	T12M
13.0	3.8	4.0	30	5	60		121838		116278	
13.0	4.1	4.0	30	5	60				120675	
13.0	4.2	4.0	30	5	60					126246
13.0	4.9	4.0	30	5	60		111410		111419	
13.0	5.0	4.0	30	5	60			125716		
13.0	5.2	4.0	30	5	60					126247
13.0	5.4	4.0	30	5	60	124194	111411	115895	111420	
13.0	5.7	4.0	30	5	60				119940	
13.0	5.8	4.0	30	5	60		111412	125717	111421	119611
13.0	6.0	4.0	30	5	60	127248	111413	126282	111422	
13.0	6.3	4.0	30	5	60	124100	111414		111423	126248
13.0	6.5	4.0	30	5	60	120620	111415	104898	111424	
13.0	6.6	4.0	30	5	60	121365				
13.0	6.7	4.0	30	5	60	123406	111416		111425	
13.0	6.9	4.0	30	5	60			125718		
13.0	7.0	4.0	30	5	60		111417		111426	
13.0	7.5	4.0	30	5	60		111418	121580	111427	
13.0	8.5	4.0	30	5	60			104897		
13.0	9.2	4.0	30	5	60		126566			

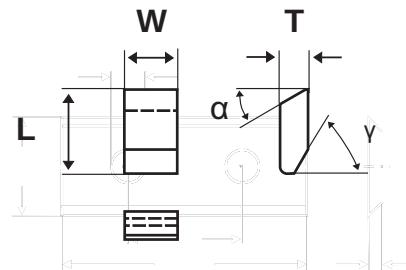
Note: Also available pretinned! Add "-PT" to part number!

EN Carbide saw tips for circular saws
 DE Hartmetallsägezähne für Kreissägen
 FR Dents de scie pour scies circulaires
 IT Dentelli per lame circolari
 ES Dientes de sierra para sierras circulares



	L mm	W mm	T mm	α	β	γ	T06MF
	14.5	5.0	4.0	30	0	70	111390
	14.5	5.5	4.0	30	0	70	111391
	14.5	6.0	4.0	30	0	70	111392
	14.5	6.5	4.0	30	0	70	111393
	14.5	7.0	4.0	30	0	70	111394
	14.5	7.5	4.0	30	0	70	111395
	14.5	8.0	4.0	30	0	70	111396
	14.5	8.5	4.0	30	0	70	119077
	14.5	9.0	4.0	30	0	70	111397
	14.5	10.0	4.0	30	0	70	111398
	14.5	10.5	4.0	30	0	70	111399
	14.5	11.0	4.0	30	0	70	111400
	14.5	12.0	4.0	30	0	70	111401
	14.5	13.0	4.0	30	0	70	111402
	14.5	14.0	4.0	30	0	70	111403
	14.5	15.0	4.0	30	0	70	111404
	14.5	16.0	4.0	30	0	70	111405

	L mm	W mm	T mm	α	β	γ	T03MG-CR (T05CR)	T03F-CR (T06CR)	T04F
	10.5	3.7	2.6	25	7	77	124256	124257	124255

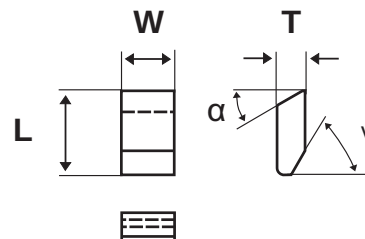


CW Style
inch

EN Carbide saw tips for circular saws
DE Hartmetallsägezähne für Kreissägen
FR Dents de scie pour scies circulaires
IT Dentelli per lame circolari
ES Dientes de sierra para sierras circulares

CWB	L		W		T		α	β	γ	T03F-CR (T06CR)	T10MG	T06MF
	inch	mm	inch	mm	inch	mm						
7100	0.281	7.1	0.100	2.5	0.078	2.0	30	0	60	113824	113836	113848
7110	0.281	7.1	0.110	2.8	0.078	2.0	30	0	60	113825	113837	113849
7120	0.281	7.1	0.120	3.0	0.078	2.0	30	0	60	113826	113838	113850
7135	0.281	7.1	0.135	3.4	0.078	2.0	30	0	60	113827	113839	113851
7150	0.281	7.1	0.150	3.8	0.078	2.0	30	0	60	113828	113840	113852
7165	0.281	7.1	0.165	4.2	0.078	2.0	30	0	60	113829	113841	113853
7170	0.281	7.1	0.170	4.3	0.078	2.0	30	0	60	113830	113842	113854
7180	0.281	7.1	0.180	4.6	0.078	2.0	30	0	60	113831	113843	113855
7195	0.281	7.1	0.195	5.0	0.078	2.0	30	0	60	113832	113844	113856
7200	0.281	7.1	0.200	5.1	0.078	2.0	30	0	60	113833	113845	113857
7215	0.281	7.1	0.215	5.5	0.078	2.0	30	0	60	113834	113846	113858
7230	0.281	7.1	0.230	5.8	0.078	2.0	30	0	60	113835	113847	113859

CWD	L		W		T		α	β	γ	T03F-CR (T06CR)	T10MG	T06MF	T15C
	inch	mm	inch	mm	inch	mm							
7100	0.312	7.9	0.100	2.5	0.093	2.4	30	0	60	111288	112629	111311	111334
7110	0.312	7.9	0.110	2.8	0.093	2.4	30	0	60	111289	112630	111312	111335
7115	0.312	7.9	0.115	2.9	0.093	2.4	30	0	60	111290	112631	111313	111336
7120	0.312	7.9	0.120	3.0	0.093	2.4	30	0	60	111291	112632	111314	111337
7125	0.312	7.9	0.125	3.2	0.093	2.4	30	0	60	111292	112633	111315	111338
7130	0.312	7.9	0.130	3.3	0.093	2.4	30	0	60	111293	112634	111316	111339
7135	0.312	7.9	0.135	3.4	0.093	2.4	30	0	60	111294	112635	111317	111340
7140	0.312	7.9	0.140	3.6	0.093	2.4	30	0	60	111295	112636	111318	111341
7150	0.312	7.9	0.150	3.8	0.093	2.4	30	0	60	111296	112637	111319	111342
7160	0.312	7.9	0.160	4.1	0.093	2.4	30	0	60	111297	112638	111320	111343
7165	0.312	7.9	0.165	4.2	0.093	2.4	30	0	60	111298	112639	111321	111344
7170	0.312	7.9	0.170	4.3	0.093	2.4	30	0	60	111299	112640	111322	111345
7175	0.312	7.9	0.175	4.4	0.093	2.4	30	0	60	111300	112641	111323	111346
7180	0.312	7.9	0.180	4.6	0.093	2.4	30	0	60	111301	112642	111324	111347
7185	0.312	7.9	0.185	4.7	0.093	2.4	30	0	60	111302	112643	111325	111348
7190	0.312	7.9	0.190	4.8	0.093	2.4	30	0	60	111303	112644	111326	111349
7200	0.312	7.9	0.200	5.1	0.093	2.4	30	0	60	111304	112645	111327	111350
7215	0.312	7.9	0.215	5.5	0.093	2.4	30	0	60	111305	112646	111328	111351
7220	0.312	7.9	0.220	5.6	0.093	2.4	30	0	60	111306	112647	111329	111352
7230	0.312	7.9	0.230	5.8	0.093	2.4	30	0	60	111307	112648	111330	111353
7240	0.312	7.9	0.240	6.1	0.093	2.4	30	0	60	111308	112649	111331	111354
7250	0.312	7.9	0.250	6.4	0.093	2.4	30	0	60	111309	112650	111332	111355
7280	0.312	7.9	0.280	7.1	0.093	2.4	30	0	60	112653	112651	112654	112655
7312	0.312	7.9	0.312	7.9	0.093	2.4	30	0	60	111310	112652	111333	111356

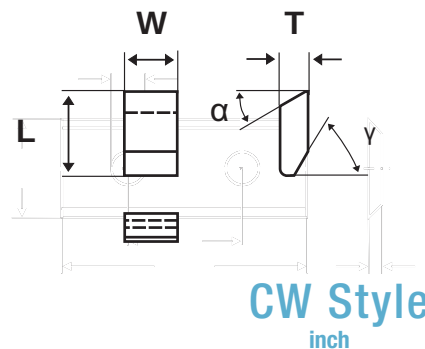


CW Style
inch

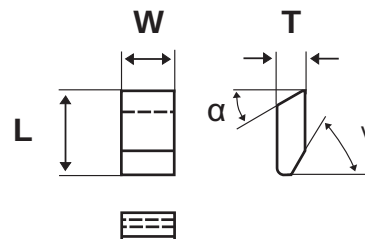
EN Carbide saw tips for circular saws
DE Hartmetallsägezähne für Kreissägen
FR Dents de scie pour scies circulaires
IT Dentelli per lame circolari
ES Dientes de sierra para sierras circulares

CWF	L		W		T		α	β	γ	T10MG	T06MF	T12M
	inch	mm	inch	mm	inch	mm						
7110	0.500	12.7	0.110	2.8	0.125	3.2	35	0	70	111225	107257	109391
7115	0.500	12.7	0.115	2.9	0.125	3.2	35	0	70	111226	107258	109392
7120	0.500	12.7	0.120	3.0	0.125	3.2	35	0	70	111227	107259	109393
7125	0.500	12.7	0.125	3.2	0.125	3.2	35	0	70	111228	107260	109394
7130	0.500	12.7	0.130	3.3	0.125	3.2	35	0	70	111229	107261	109395
7140	0.500	12.7	0.140	3.6	0.125	3.2	35	0	70	111230	107263	109397
7150	0.500	12.7	0.150	3.8	0.125	3.2	35	0	70	111231	107265	109399
7160	0.500	12.7	0.160	4.1	0.125	3.2	35	0	70	111232	107266	109400
7165	0.500	12.7	0.165	4.2	0.125	3.2	35	0	70	111233	107267	109401
7170	0.500	12.7	0.170	4.3	0.125	3.2	35	0	70	111234	107268	109402
7180	0.500	12.7	0.180	4.6	0.125	3.2	35	0	70	111235	107269	109403
7185	0.500	12.7	0.185	4.7	0.125	3.2	35	0	70	112661	112663	112664
7190	0.500	12.7	0.190	4.8	0.125	3.2	35	0	70	111236	107271	109405
7200	0.500	12.7	0.200	5.1	0.125	3.2	35	0	70	111237	107272	109406
7210	0.500	12.7	0.210	5.3	0.125	3.2	35	0	70	111238	107273	109407
7215	0.500	12.7	0.215	5.5	0.125	3.2	35	0	70	111239	107274	109408
7220	0.500	12.7	0.220	5.6	0.125	3.2	35	0	70	111240	107275	109409
7230	0.500	12.7	0.230	5.8	0.125	3.2	35	0	70	111241	107276	109410
7240	0.500	12.7	0.240	6.1	0.125	3.2	35	0	70	111242	107278	109412
7250	0.500	12.7	0.250	6.4	0.125	3.2	35	0	70	111243	107279	109413
7260	0.500	12.7	0.260	6.6	0.125	3.2	35	0	70	111244	107280	109414
7270	0.500	12.7	0.270	6.9	0.125	3.2	35	0	70	111245	107282	109416
7275	0.500	12.7	0.275	7.0	0.125	3.2	35	0	70	111246	107283	109417
7280	0.500	12.7	0.280	7.1	0.125	3.2	35	0	70	111247	107284	109418
7290	0.500	12.7	0.290	7.4	0.125	3.2	35	0	70	111248	107285	109419
7300	0.500	12.7	0.300	7.6	0.125	3.2	35	0	70	111249	107286	109420
7310	0.500	12.7	0.310	7.9	0.125	3.2	35	0	70	111250	107287	109421
7312	0.500	12.7	0.312	7.9	0.125	3.2	35	0	70	111251	107288	109422
7330	0.500	12.7	0.330	8.4	0.125	3.2	35	0	70	111252	107290	109424
7375	0.500	12.7	0.375	9.5	0.125	3.2	35	0	70	111253	107294	109428
7400	0.500	12.7	0.400	10.2	0.125	3.2	35	0	70			112666
7437	0.500	12.7	0.437	11.1	0.125	3.2	35	0	70	111254	107297	109431
7500	0.500	12.7	0.500	12.7	0.125	3.2	35	0	70	111255	107298	109432
7625	0.500	12.7	0.625	15.9	0.125	3.2	35	0	70	111256	107300	109434
7687	0.500	12.7	0.687	17.4	0.125	3.2	35	0	70	111257	107301	109435
7750	0.500	12.7	0.750	19.1	0.125	3.2	35	0	70	111258	107302	109436

EN Carbide saw tips for circular saws
 DE Hartmetallsägezähne für Kreissägen
 FR Dents de scie pour scies circulaires
 IT Dentelli per lame circolari
 ES Dientes de sierra para sierras circulares



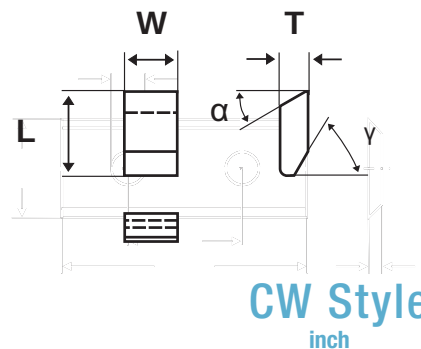
CWG	L inch	mm	W inch	mm	T inch	mm	α	β	γ	T03F-CR (T06CR)	T10MG	T06MF	T12M	T15C
7110	0.375	9.5	0.110	2.8	0.125	3.2	30	0	60	107349	111259	107383	109437	107417
7120	0.375	9.5	0.120	3.0	0.125	3.2	30	0	60	107350	111260	107384	109438	107418
7125	0.375	9.5	0.125	3.2	0.125	3.2	30	0	60			112667		
7130	0.375	9.5	0.130	3.3	0.125	3.2	30	0	60	107352	111261	107386	109440	107420
7140	0.375	9.5	0.140	3.6	0.125	3.2	30	0	60	107354	111262	107388	109442	107422
7150	0.375	9.5	0.150	3.8	0.125	3.2	30	0	60	107355	111263	107389	109443	107423
7160	0.375	9.5	0.160	4.1	0.125	3.2	30	0	60	107356	111264	107390	109444	107424
7165	0.375	9.5	0.165	4.2	0.125	3.2	30	0	60	107357	111265	107391	109445	107425
7170	0.375	9.5	0.170	4.3	0.125	3.2	30	0	60	107358	111266	107392	109446	107426
7175	0.375	9.5	0.175	4.4	0.125	3.2	30	0	60	107362	111267	107385	109450	107430
7180	0.375	9.5	0.180	4.6	0.125	3.2	30	0	60	107359	111268	107393	109447	107427
7185	0.375	9.5	0.185	4.7	0.125	3.2	30	0	60	107360	111269	107394	109448	107428
7190	0.375	9.5	0.190	4.8	0.125	3.2	30	0	60	107361	111270	107395	109449	107429
7200	0.375	9.5	0.200	5.1	0.125	3.2	30	0	60	107363	111271	107397	109451	107431
7210	0.375	9.5	0.210	5.3	0.125	3.2	30	0	60	107364	111272	107398	109452	107432
7215	0.375	9.5	0.215	5.5	0.125	3.2	30	0	60	107365	111273	107399	109453	107433
7220	0.375	9.5	0.220	5.6	0.125	3.2	30	0	60	107366	111274	107400	109454	107434
7230	0.375	9.5	0.230	5.8	0.125	3.2	30	0	60	107368	111275	107402	109456	107436
7240	0.375	9.5	0.240	6.1	0.125	3.2	30	0	60	107369	111276	107403	109457	107437
7250	0.375	9.5	0.250	6.4	0.125	3.2	30	0	60	107370	111277	107404	109458	107438
7260	0.375	9.5	0.260	6.6	0.125	3.2	30	0	60	107371	111278	107405	109459	107439
7270	0.375	9.5	0.270	6.9	0.125	3.2	30	0	60	107373	111279	107407	109461	107441
7275	0.375	9.5	0.275	7.0	0.125	3.2	30	0	60	107374	111280	107408	109462	107442
7280	0.375	9.5	0.280	7.1	0.125	3.2	30	0	60	107375	111281	107409	109463	107443
7300	0.375	9.5	0.300	7.6	0.125	3.2	30	0	60	107376	111282	107410	109464	107444
7310	0.375	9.5	0.310	7.9	0.125	3.2	30	0	60	107378	111283	107412	109466	107446
7312	0.375	9.5	0.312	7.9	0.125	3.2	30	0	60	107377	111284	107411	109465	107445
7350	0.375	9.5	0.350	8.9	0.125	3.2	30	0	60	107380	111285	107414	109468	111218
7400	0.375	9.5	0.400	10.2	0.125	3.2	30	0	60	107379	111286	107413	109467	107447
7500	0.375	9.5	0.500	12.7	0.125	3.2	30	0	60	107381	111287	107415	109469	107449



CW Style
inch

EN Carbide saw tips for circular saws
DE Hartmetallsägezähne für Kreissägen
FR Dents de scie pour scies circulaires
IT Dentelli per lame circolari
ES Dientes de sierra para sierras circulares

CWH	L		W		T		α	β	γ	T03F-CR (T06CR)	T04F	T06MF
	inch	mm	inch	mm	inch	mm						
7120	0.344	8.7	0.120	3.0	0.125	3.2	30	0	60	114408	114409	114410
7135	0.344	8.7	0.135	3.4	0.125	3.2	30	0	60	114413	114412	114411
7140	0.344	8.7	0.140	3.6	0.125	3.2	30	0	60	114414	114415	114416
7150	0.344	8.7	0.150	3.8	0.125	3.2	30	0	60	114419	114418	114417
7160	0.344	8.7	0.160	4.1	0.125	3.2	30	0	60	114420	114421	114422
7165	0.344	8.7	0.165	4.2	0.125	3.2	30	0	60	114425	114424	114423
7180	0.344	8.7	0.180	4.6	0.125	3.2	30	0	60	114426	114427	114428
7185	0.344	8.7	0.185	4.7	0.125	3.2	30	0	60	114431	114430	114429
7190	0.344	8.7	0.190	4.8	0.125	3.2	30	0	60	114432	114433	114434
7200	0.344	8.7	0.200	5.1	0.125	3.2	30	0	60	114438	114436	114435
7210	0.344	8.7	0.210	5.3	0.125	3.2	30	0	60	114440	114441	114442
7215	0.344	8.7	0.215	5.5	0.125	3.2	30	0	60	114446	114445	114443
7220	0.344	8.7	0.220	5.6	0.125	3.2	30	0	60	114447	114448	114449
7230	0.344	8.7	0.230	5.8	0.125	3.2	30	0	60	114453	114452	114451
7240	0.344	8.7	0.240	6.1	0.125	3.2	30	0	60	114454	114455	114456
7250	0.344	8.7	0.250	6.4	0.125	3.2	30	0	60	114459	114458	114457
7260	0.344	8.7	0.260	6.6	0.125	3.2	30	0	60	114460	114461	114462



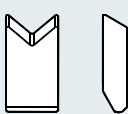
EN Carbide saw tips for circular saws
 DE Hartmetallsägezähne für Kreissägen
 FR Dents de scie pour scies circulaires
 IT Dentelli per lame circolari
 ES Dientes de sierra para sierras circulares

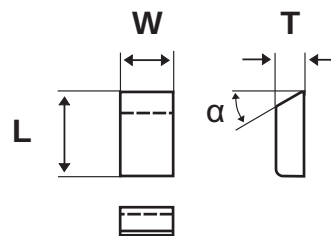
	CWD Right	L inch	mm	W inch	mm	T inch	mm	α	β	γ	T03F-CR (T06CR)	T10MG	T06MF
	7165	0.312	7.9	0.165	4.2	0.093	2.4	30	0	60	111691	111701	111711
	7185	0.312	7.9	0.185	4.7	0.093	2.4	30	0	60	111693	111703	111713
	7200	0.312	7.9	0.200	5.1	0.093	2.4	30	0	60	111695	111705	111715
	7215	0.312	7.9	0.215	5.5	0.093	2.4	30	0	60	111697	111707	111717
	7250	0.312	7.9	0.250	6.4	0.093	2.4	30	0	60	111699	111709	111719

	CWD Left	L inch	mm	W inch	mm	T inch	mm	α	β	γ	T03F-CR (T06CR)	T10MG	T06MF
	7165	0.312	7.9	0.165	4.2	0.093	2.4	30	0	60	111692	111702	111712
	7185	0.312	7.9	0.185	4.7	0.093	2.4	30	0	60	111694	111704	111714
	7200	0.312	7.9	0.200	5.1	0.093	2.4	30	0	60	111696	111706	111716
	7215	0.312	7.9	0.215	5.5	0.093	2.4	30	0	60	111698	111708	111718
	7250	0.312	7.9	0.250	6.4	0.093	2.4	30	0	60	111700	111710	111720

	CWG Right	L		W		T		α	β	γ	T06MF	T15C
		inch	mm	inch	mm	inch	mm					
	7230	0.375	9.5	0.230	5.8	0.125	3.2	30	0	60	107457	107451
	7250	0.375	9.5	0.250	6.4	0.125	3.2	30	0	60	107459	107453
	7265	0.375	9.5	0.265	6.7	0.125	3.2	30	0	60	107463	107465
	7270	0.375	9.5	0.270	6.9	0.125	3.2	30	0	60	107461	107455

	CWG Left	L inch	mm	W inch	mm	T inch	mm	α	β	γ	T06MF	T15C
	7230	0.375	9.5	0.230	5.8	0.125	3.2	30	0	60	107458	107452
	7250	0.375	9.5	0.250	6.4	0.125	3.2	30	0	60	107460	107454
	7265	0.375	9.5	0.265	6.7	0.125	3.2	30	0	60	107464	107466
	7270	0.375	9.5	0.270	6.9	0.125	3.2	30	0	60	107462	107456

	CWEV	L		W		T		α	β	γ	T06MF
		inch	mm	inch	mm	inch	mm				
	7200	0.375	9.5	0.200	5.1	0.093	2.4	30	0	60	119868

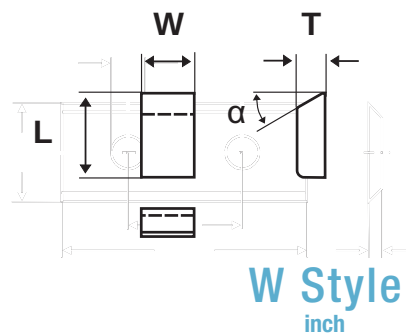


W Style
inch

EN Carbide saw tips for circular saws
DE Hartmetallsägezähne für Kreissägen
FR Dents de scie pour scies circulaires
IT Dentelli per lame circolari
ES Dientes de sierra para sierras circulares

WB	L		W		T		α	β	γ	T06MF	T10MG
	inch	mm	inch	mm	inch	mm					
7100	0.281	7.1	0.100	2.5	0.078	2.0	30	0	0	114161	114162
7105	0.281	7.1	0.105	2.7	0.078	2.0	30	0	0	114164	114163
7120	0.281	7.1	0.120	3.0	0.078	2.0	30	0	0	114165	114166
7135	0.281	7.1	0.135	3.4	0.078	2.0	30	0	0	114168	114167
7150	0.281	7.1	0.150	3.8	0.078	2.0	30	0	0	114169	114170
7165	0.281	7.1	0.165	4.2	0.078	2.0	30	0	0	114172	114171
7180	0.281	7.1	0.180	4.6	0.078	2.0	30	0	0	114173	114174
7185	0.281	7.1	0.185	4.7	0.078	2.0	30	0	0	114176	114175
7195	0.281	7.1	0.195	5.0	0.078	2.0	30	0	0	114177	114178
7200	0.281	7.1	0.200	5.1	0.078	2.0	30	0	0	114180	114179
7215	0.281	7.1	0.215	5.5	0.078	2.0	30	0	0	114181	114182
7250	0.281	7.1	0.250	6.4	0.078	2.0	30	0	0	114184	114183

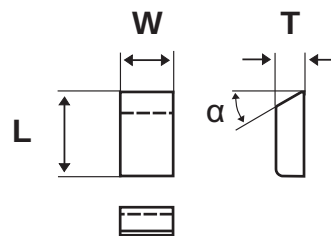
WD	L		W		T		α	β	γ	T03F-CR (T06CR)	T04F	T06MF	T10MG
	inch	mm	inch	mm	inch	mm							
7100	0.312	7.9	0.100	2.5	0.093	2.4	30	0	0	114195	114196	114197	114198
7110	0.312	7.9	0.110	2.8	0.093	2.4	30	0	0	114202	114201	114200	114199
7115	0.312	7.9	0.115	2.9	0.093	2.4	30	0	0	114203	114204	114205	114206
7120	0.312	7.9	0.120	3.0	0.093	2.4	30	0	0	114210	114209	114208	114207
7135	0.312	7.9	0.135	3.4	0.093	2.4	30	0	0	114211	114212	114213	114214
7140	0.312	7.9	0.140	3.6	0.093	2.4	30	0	0	114218	114217	114216	114215
7150	0.312	7.9	0.150	3.8	0.093	2.4	30	0	0	114219	114220	114221	114222
7160	0.312	7.9	0.160	4.1	0.093	2.4	30	0	0	114226	114225	114224	114223
7165	0.312	7.9	0.165	4.2	0.093	2.4	30	0	0	114227	114228	114229	114230
7170	0.312	7.9	0.170	4.3	0.093	2.4	30	0	0	114234	114233	114232	114231
7185	0.312	7.9	0.185	4.7	0.093	2.4	30	0	0	114235	114237	114238	114239
7190	0.312	7.9	0.190	4.8	0.093	2.4	30	0	0	114243	114242	114241	114240
7200	0.312	7.9	0.200	5.1	0.093	2.4	30	0	0	114244	114245	114246	114247
7215	0.312	7.9	0.215	5.5	0.093	2.4	30	0	0	114251	114250	114249	114248
7230	0.312	7.9	0.230	5.8	0.093	2.4	30	0	0	114252	114253	114254	114255
7240	0.312	7.9	0.240	6.1	0.093	2.4	30	0	0	114259	114258	114257	114256
7250	0.312	7.9	0.250	6.4	0.093	2.4	30	0	0	114260	114261	114262	114263
7280	0.312	7.9	0.280	7.1	0.093	2.4	30	0	0	114267	114266	114265	114264
7312	0.312	7.9	0.312	7.9	0.093	2.4	30	0	0	114268	114269	114270	114271



EN Carbide saw tips for circular saws
DE Hartmetallsägezähne für Kreissägen
FR Dents de scie pour scies circulaires
IT Dentelli per lame circolari
ES Dientes de sierra para sierras circulares

WE	L		W		T		α	β	γ	T03F-CR (T06CR)	T06MF	T10MG
	inch	mm	inch	mm	inch	mm						
7110	0.375	9.5	0.110	2.8	0.093	2.4	30	0	0	114274	114273	114272
7130	0.375	9.5	0.130	3.3	0.093	2.4	30	0	0	114275	114276	114277
7135	0.375	9.5	0.135	3.4	0.093	2.4	30	0	0	114280	114279	114278
7140	0.375	9.5	0.140	3.6	0.093	2.4	30	0	0	114281	114282	114283
7150	0.375	9.5	0.150	3.8	0.093	2.4	30	0	0	114286	114285	114284
7165	0.375	9.5	0.165	4.2	0.093	2.4	30	0	0	114288	114289	114290
7170	0.375	9.5	0.170	4.3	0.093	2.4	30	0	0	114293	114292	114291
7185	0.375	9.5	0.185	4.7	0.093	2.4	30	0	0	114294	114295	114296
7200	0.375	9.5	0.200	5.1	0.093	2.4	30	0	0	114299	114298	114297
7215	0.375	9.5	0.215	5.5	0.093	2.4	30	0	0	114300	114301	114302
7225	0.375	9.5	0.225	5.7	0.093	2.4	30	0	0	114305	114304	114303
7235	0.375	9.5	0.235	6.0	0.093	2.4	30	0	0	114306	114307	114308
7250	0.375	9.5	0.250	6.4	0.093	2.4	30	0	0	114311	114310	114309
7265	0.375	9.5	0.265	6.7	0.093	2.4	30	0	0	114312	114313	114314
7281	0.375	9.5	0.281	7.1	0.093	2.4	30	0	0	114317	114316	114315
7312	0.375	9.5	0.312	7.9	0.093	2.4	30	0	0	114318	114319	114320
7350	0.375	9.5	0.350	8.9	0.093	2.4	30	0	0	114323	114322	114321
7375	0.375	9.5	0.375	9.5	0.093	2.4	30	0	0	114324	114325	114326

WF	L		W		T		α	β	γ	T06MF	T10MG
	inch	mm	inch	mm	inch	mm					
7150	0.500	12.7	0.150	3.8	0.125	3.2	35	0	0	114328	114327
7160	0.500	12.7	0.160	4.1	0.125	3.2	35	0	0	114329	114330
7165	0.500	12.7	0.165	4.2	0.125	3.2	35	0	0	114332	114334
7170	0.500	12.7	0.170	4.3	0.125	3.2	35	0	0	114336	114335
7180	0.500	12.7	0.180	4.6	0.125	3.2	35	0	0	114337	114338
7185	0.500	12.7	0.185	4.7	0.125	3.2	35	0	0	114340	114339
7190	0.500	12.7	0.190	4.8	0.125	3.2	35	0	0	114341	114342
7200	0.500	12.7	0.200	5.1	0.125	3.2	35	0	0	114344	114343
7210	0.500	12.7	0.210	5.3	0.125	3.2	35	0	0	114345	114346
7215	0.500	12.7	0.215	5.5	0.125	3.2	35	0	0	114348	114347
7220	0.500	12.7	0.220	5.6	0.125	3.2	35	0	0	114349	114350
7230	0.500	12.7	0.230	5.8	0.125	3.2	35	0	0	114352	114351
7240	0.500	12.7	0.240	6.1	0.125	3.2	35	0	0	114353	114354
7250	0.500	12.7	0.250	6.4	0.125	3.2	35	0	0	114356	114355
7260	0.500	12.7	0.260	6.6	0.125	3.2	35	0	0	114357	114358
7270	0.500	12.7	0.270	6.9	0.125	3.2	35	0	0	114360	114359
7275	0.500	12.7	0.275	7.0	0.125	3.2	35	0	0	114361	114362
7280	0.500	12.7	0.280	7.1	0.125	3.2	35	0	0	114364	114363
7300	0.500	12.7	0.300	7.6	0.125	3.2	35	0	0	114365	114366
7312	0.500	12.7	0.312	7.9	0.125	3.2	35	0	0	114368	114367



W Style
inch

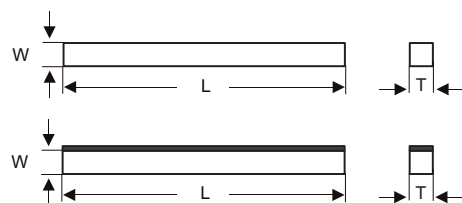
EN Carbide saw tips for circular saws
DE Hartmetallsägezähne für Kreissägen
FR Dents de scie pour scies circulaires
IT Dentelli per lame circolari
ES Dientes de sierra para sierras circulares

WF	L		W		T		α	β	γ	T06MF	T10MG
	inch	mm	inch	mm	inch	mm					
7350	0.500	12.7	0.350	8.9	0.125	3.2	35	0	0	114369	114370
7375	0.500	12.7	0.375	9.5	0.125	3.2	35	0	0	114372	114371
7400	0.500	12.7	0.400	10.2	0.125	3.2	35	0	0	114373	114374
7437	0.500	12.7	0.437	11.1	0.125	3.2	35	0	0	114376	114375
7500	0.500	12.7	0.500	12.7	0.125	3.2	35	0	0	114377	114378
7625	0.500	12.7	0.625	15.9	0.125	3.2	35	0	0	114380	114379

WG	L		W		T		α	β	γ	T06MF
	inch	mm	inch	mm	inch	mm				
7150	0.375	9.5	0.150	3.8	0.125	3.2	30	0	0	114381
7165	0.375	9.5	0.165	4.2	0.125	3.2	30	0	0	114382
7180	0.375	9.5	0.180	4.6	0.125	3.2	30	0	0	114383
7185	0.375	9.5	0.185	4.7	0.125	3.2	30	0	0	114384
7190	0.375	9.5	0.190	4.8	0.125	3.2	30	0	0	114385
7200	0.375	9.5	0.200	5.1	0.125	3.2	30	0	0	114386
7215	0.375	9.5	0.215	5.5	0.125	3.2	30	0	0	114387
7220	0.375	9.5	0.220	5.6	0.125	3.2	30	0	0	114388
7230	0.375	9.5	0.230	5.8	0.125	3.2	30	0	0	114389
7240	0.375	9.5	0.240	6.1	0.125	3.2	30	0	0	114390
7250	0.375	9.5	0.250	6.4	0.125	3.2	30	0	0	114391
7265	0.375	9.5	0.265	6.7	0.125	3.2	30	0	0	114392
7275	0.375	9.5	0.275	7.0	0.125	3.2	30	0	0	114393
7280	0.375	9.5	0.280	7.1	0.125	3.2	30	0	0	114394
7300	0.375	9.5	0.300	7.6	0.125	3.2	30	0	0	114395
7312	0.375	9.5	0.312	7.9	0.125	3.2	30	0	0	114396
7350	0.375	9.5	0.350	8.9	0.125	3.2	30	0	0	114397
7400	0.375	9.5	0.400	10.2	0.125	3.2	30	0	0	114398
7500	0.375	9.5	0.500	12.7	0.125	3.2	30	0	0	114399

WQ	L		W		T		α	β	γ	T10MG
	inch	mm	inch	mm	inch	mm				
7200	0.375	9.5	0.200	5.1	0.156	4.0	30	0	0	114400
7265	0.375	9.5	0.265	6.7	0.156	4.0	30	0	0	114401
7300	0.375	9.5	0.300	7.6	0.156	4.0	30	0	0	114402
7335	0.375	9.5	0.335	8.5	0.156	4.0	30	0	0	114403
7400	0.375	9.5	0.400	10.2	0.156	4.0	30	0	0	114404
7460	0.375	9.5	0.460	11.7	0.156	4.0	30	0	0	114405
7500	0.375	9.5	0.500	12.7	0.156	4.0	30	0	0	114406
7625	0.375	9.5	0.625	15.9	0.156	4.0	30	0	0	114407

EN Strobe blanks for circular saws
 DE Wischerblätter für Kreissägen
 FR Racleurs pour scies circulaires
 IT Barrette per rasanti di lame circolari
 ES Rasuradores para sierras circulares

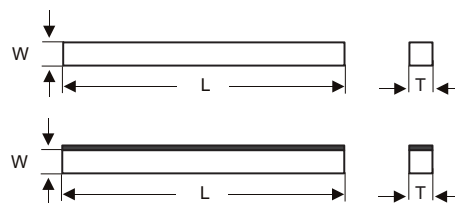


EN metric
 DE metrisch
 FR métrique
 IT metrico
 ES métrico

L mm	W mm	T mm	T06MF
25	2	2	111033
30	2	2	111034
35	2	2	113524
310	2	2	113525
30	2.3	2	113526
40	2.3	2	111040
310	2.3	2	113527
25	2.5	2	113529
30	2.5	2	111035
35	2.5	2	113531
45	2.5	2	111044
310	2.5	2	113532
25	3	2	109812
30	3	2	043520
35	3	2	113533
40	3	2	043522
50	3	2	113541
310	3	2	113542
30	3.3	2	049602
35	3.3	2	113544
40	3.3	2	113546
50	3.3	2	113549
55	3.3	2	113551
60	3.3	2	113553
310	3.3	2	113555
30	3.5	2	043514
40	3.5	2	043516
45	3.5	2	113557
50	3.5	2	109811
310	3.5	2	113564
30	3.7	2	036174
40	3.7	2	113565
50	3.7	2	113566
55	3.7	2	113567
70	3.7	2	113568
310	3.7	2	113569
20	4	2	111032
30	4	2	043521
35	4	2	113572
40	4	2	043523
45	4	2	113574
50	4	2	111046
55	4	2	113576
60	4	2	111049

L mm	W mm	T mm	T06MF
65	4	2	113577
310	4	2	113578
50	4.2	2	036811
60	4.2	2	113582
70	4.2	2	113583
310	4.2	2	113584
30	4.5	2	111037
40	4.5	2	111041
45	4.5	2	111045
50	4.5	2	111047
55	4.5	2	113585
60	4.5	2	111050
65	4.5	2	113590
70	4.5	2	113591
310	4.5	2	113592
310	4.7	2	113593
40	5	2	043525
45	5	2	113594
50	5	2	113595
55	5	2	113596
60	5	2	111051
65	5	2	113597
310	5	2	113598
30	5.2	2	111038
30	5.5	2	111039
40	5.5	2	111042
50	5.5	2	111048
60	5.5	2	113599
65	5.5	2	113600
310	5.5	2	113773
40	5.8	2	111043
60	5.8	2	111052
310	5.8	2	113601
60	6	2	113602
65	6	2	113603
310	6	2	113604
60	6.2	2	111053
310	6.5	2	113605
310	7	2	113606
310	7.5	2	113607

EN Strobe blanks for circular saws
 DE Wischerblätter für Kreissägen
 FR Racleurs pour scies circulaires
 IT Barrette per rasanti di lame circolari
 ES Rasuradores para sierras circulares



inch

ST	L		W		T		T08MF
	inch	mm	inch	mm	inch	mm	
ST1120	1.000	25.4	0.120	3.0	0.125	3.2	113528
ST1130	1.000	25.4	0.130	3.3	0.125	3.2	113530
ST1140	1.000	25.4	0.140	3.6	0.125	3.2	113534
ST1150	1.000	25.4	0.150	3.8	0.125	3.2	113535
ST1160	1.000	25.4	0.160	4.1	0.125	3.2	113536
ST1170	1.000	25.4	0.170	4.3	0.125	3.2	113537
ST1180	1.000	25.4	0.180	4.6	0.125	3.2	113538
ST1190	1.000	25.4	0.190	4.8	0.125	3.2	113539
ST1200	1.000	25.4	0.200	5.1	0.125	3.2	113540
ST1210	1.000	25.4	0.210	5.3	0.125	3.2	113543
ST1220	1.000	25.4	0.220	5.6	0.125	3.2	113545
ST1230	1.000	25.4	0.230	5.8	0.125	3.2	113547
ST1240	1.000	25.4	0.240	6.1	0.125	3.2	113548
ST1250	1.000	25.4	0.250	6.4	0.125	3.2	113550
ST1260	1.000	25.4	0.260	6.6	0.125	3.2	113552
ST1270	1.000	25.4	0.270	6.9	0.125	3.2	114089
ST1280	1.000	25.4	0.280	7.1	0.125	3.2	113554
ST1290	1.000	25.4	0.290	7.4	0.125	3.2	113556

ST	L		W		T		T08MF
	inch	mm	inch	mm	inch	mm	
ST2120	1.250	31.8	0.120	3.0	0.125	3.2	113558
ST2130	1.250	31.8	0.130	3.3	0.125	3.2	113559
ST2140	1.250	31.8	0.140	3.6	0.125	3.2	113560
ST2150	1.250	31.8	0.150	3.8	0.125	3.2	113561
ST2160	1.250	31.8	0.160	4.1	0.125	3.2	113562
ST2170	1.250	31.8	0.170	4.3	0.125	3.2	113563
ST2180	1.250	31.8	0.180	4.6	0.125	3.2	113570
ST2190	1.250	31.8	0.190	4.8	0.125	3.2	113571
ST2200	1.250	31.8	0.200	5.1	0.125	3.2	113573
ST2210	1.250	31.8	0.210	5.3	0.125	3.2	113575
ST2220	1.250	31.8	0.220	5.6	0.125	3.2	113579
ST2230	1.250	31.8	0.230	5.8	0.125	3.2	113580
ST2240	1.250	31.8	0.240	6.1	0.125	3.2	113581
ST2250	1.250	31.8	0.250	6.4	0.125	3.2	113586
ST2260	1.250	31.8	0.260	6.6	0.125	3.2	113587
ST2280	1.250	31.8	0.280	7.1	0.125	3.2	113588
ST2290	1.250	31.8	0.290	7.4	0.125	3.2	113589



- EN Brazing alloys and fluxes
DE Lot und Flussmittel
FR Alliages et flux de brasage
IT Leghe brasanti e disossidanti
ES Aleaciones y fundentes para soldadura fuerte

EN BrazeTec 49/Cu sandwich brazing alloy strip, on spool
DE BrazeTec 49/Cu Schichtlot, auf Spule
FR BrazeTec 49/Cu alliage de brasage „sandwich“ en bande, sur bobine
IT BrazeTec 49/Cu lega brasante nastro trimetallico, in bobina
ES BrazeTec 49/Cu cinta tipo sandwich para soldadura fuerte, en carretes

Art-No.	W mm	T mm	weight kg	Features
122449	2.0	0.3	1.0 - 1.5	EN Trifoil with Cu-interlayer DE Kupfer-Zwischenschicht FR Trois feuilles avec le Cu en couche intermédiaire IT Trilamina con strato intermedio di rame ES Con la lámina de Cu intermedia
122450	2.5	0.3	1.0 - 1.5	
122451	3.0	0.3	1.0 - 1.5	
122452	3.2	0.3	1.0 - 2.0	
122453	3.5	0.3	1.5 - 2.0	
122454	4.0	0.3	1.5 - 2.0	

EN BrazeTec 49/Cu plus sandwich brazing alloy strip, on spool
DE BrazeTec 49/Cu plus Schichtlot, auf Spule
FR BrazeTec 49/Cu plus alliage de brasage „sandwich“ en bande, sur bobine
IT BrazeTec 49/Cu plus lega brasante nastro trimetallico, in bobina
ES BrazeTec 49/Cu plus cinta tipo sandwich para soldadura fuerte, en carretes

Art-No.	W mm	T mm	weight kg	Features
122455	4.0	0.3	1.5 - 2.0	EN For an extra high shear strength, with a modified Cu-interlayer DE Für starke Beanspruchung, mit modifizierter Kupfer-Zwischenschicht FR Pour très forte résistance au cisaillement, avec une liaison Cu entre couche modifiée IT Per impieghi gravosi, con strato intermedio di rame migliorato ES Para fuerte resistencia extra a cizallamiento, con la lámina de Cu intermedia modificada

EN BrazeTec 49/Cu13 sandwich brazing alloy strip for special applications, in coils
DE BrazeTec 49/Cu13 Lot für Sonderanwendungen, im Bunde
FR BrazeTec 49/Cu13 alliage de brasage „sandwich“ pour applications spéciales, en bande
IT BrazeTec 49/Cu13 lega brasante nastro trimetallico per applicazioni speciali, in bobina
ES BrazeTec 49/Cu13 cinta tipo sandwich para soldadura fuerte, en carretes

Art-No.	W mm	T mm	weight kg	
122456	40	0.8	1.0	
122457	50	0.8	1.0	
122458	60	0.8	1.0	
122459	70	0.8	1.0	



- EN Brazing alloys and fluxes
 DE Lot und Flussmittel
 FR Alliages et flux de brasage
 IT Leghe brasanti e disossidanti
 ES Aleaciones y fundentes para soldadura fuerte

EN BrazeTec h 285 brazing flux paste for automatic dispensing
 DE BrazeTec h 285 Hartlot Flussmittel-Paste für Maschinendosierung
 FR BrazeTec h 285 flux de brasage en pâte pour mise en oeuvre en automatique
 IT BrazeTec h 285 disossidante in pasta per brasatura adatto per la distribuzione automatica
 ES BrazeTec h 285 aleación en pasta con fundente para aplicar automáticamente

Art-No.		weight kg	
115300		1.5	

EN BrazeTec special h brazing flux paste for manual applications
 DE BrazeTec spezial h Hartlot Flussmittel-Paste für den Auftrag von Hand
 FR BrazeTec spécial h flux de brasage en pâte pour utilisation manuelle
 IT BrazeTec spezial h disossidante in pasta per brasatura per applicazione manuale
 ES BrazeTec spezial h aleación en pasta con fundente para aplicar manualmente

Art-No.		weight kg	
115301		1.0	

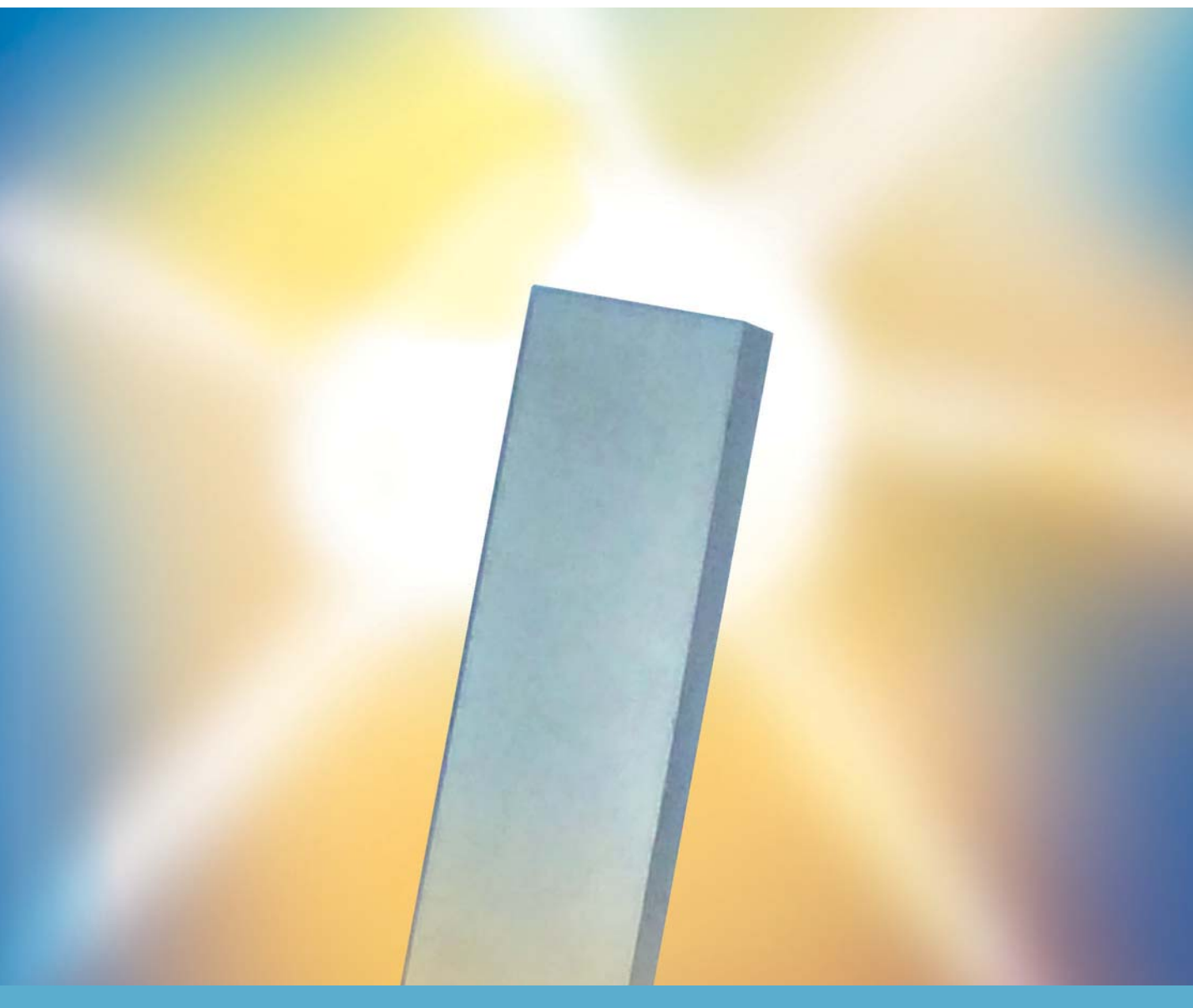


TOOLS CUT BETTER WITH TIGRA



TOOLS CUT BETTER WITH TIGRA



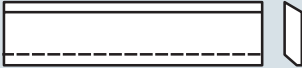
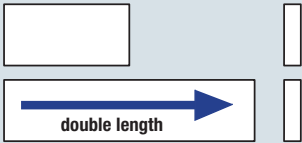
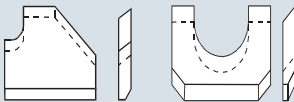
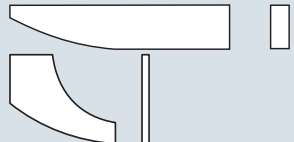
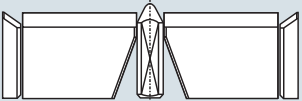
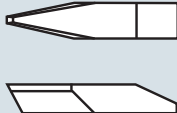
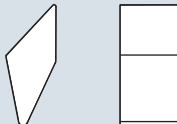


- EN Carbide for brazed tools
- DE Hartmetall für gelötete Fräser
- FR Plaquettes en carbure à braser
- IT Metallo duro per frese saldobrasate
- ES Metal duro para herramienta soldada



TOOLS CUT BETTER WITH TIGRA

EN Carbide for brazed tools
 DE Hartmetall für gelötete Fräser
 FR Plaquettes en carbure à braser
 IT Metallo duro per frese saldobrasate
 ES Metal duro para herramienta soldada

	EN Carbide strips for brazed cutters DE Hartmetallplatten zur Fräserbestückung FR Plaquettes en carbure à braser IT Placchette in metallo duro per frese ES Placas de metal duro para equipar fresas <i>metric metrisch métrique metrico métrico</i>	106 - 109
New! 	EN STB strips and DSTB double strips for brazed cutters DE Hartmetallplatten zur Fräserbestückung FR Plaquettes en carbure à braser IT Placchette in metallo duro per frese ES Placas de metal duro para equipar fresas <i>inch</i>	110 - 111
	EN Preforms for brazed cutters DE Formplatten zum Löten FR Plaquettes en carbure à braser IT Placchette per frese saldobrasate ES Placas para herramientas soldadas	112
	EN Carbide tips for router bits DE HM-Rohlinge für Oberfräser FR Ébauches pour mèches à défoncer IT Placchette sagomate per punte ES Placas de metal duro para equipar fresas	113
	EN Drill bits DE Zylinderkopfbohrer FR Mèches à façonner IT Punte per cerniere ES Brocas estrella	114 - 115
	EN Finger joint cutters DE Minizinkenfräser FR Fraises mini-aboutages IT Frese per giunzioni ES Fresas para ensamblar	115
	EN Tips for T.C.T. knives DE Rohlinge für HW-bestückte Messer FR Plaquettes pour fabriquer des fers rapportées carbure IT Placchette per fabbricare coltelli riportati HW ES Placas para equipar cuchillas con metal duro	116
	EN Tips for multicut planers DE Zähne für Vielzahnfräser FR Dents spéciales IT Dentelli per frese multitaglienti ES Dientes para fresas multicorte	116

- EN Carbide for brazed tools - Carbide grades and their applications
 DE Hartmetall für gelötete Fräser - Hartmetallsorten und ihre Anwendungen
 FR Plaquettes en carbure à braser - Les nuances de carbures et leurs applications
 IT Metallo duro per frese saldobrasate - I tipi di metallo duro e le loro applicazioni
 ES Metal duro para herramienta soldada - Calidades de metal duro y sus aplicaciones

EN	TIGRA grade	ISO	USA	Hardness	Toughness	Bending strength
DE	TIGRA - Sorte	ISO	USA	Härte	Zähigkeit	Biegebruchfestigkeit
FR	Nuance TIGRA	ISO	USA	Dureté	Ténacité	Résistance à la flexion
IT	Tipo TIGRA	ISO	Stati Uniti	Durezza	Tenacità	Resistenza flessionale
ES	Calidad TIGRA	ISO	EE.UU.	Dureza	Tenacidad	Resistencia a la flexión
	T03F-CR* old name: T06CR	K01	C4+			
	T04F	K05	C4			
	T06MF	K20	C3			
New!	T07MF-CR* UNIVERSAL	K20 - K30	C2 - C3			
	T08MF	K30	C2			
	T10MG	K10 - K40	C3+			
	TL15	K10 - K40	C3+			
	TL20	K10 - K40	C2+			

* EN Special binder
 * D Spezialbinder
 * F Liant spécial

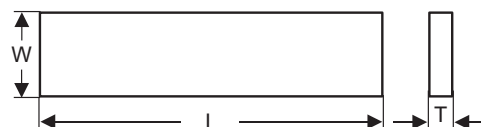
* IT Legante speciale
 * ES Composición especial

EN For technical data, please refer to the pages 4-5.
 DE Die technischen Daten entnehmen Sie bitte den Seiten 4-5.
 FR Pour les données techniques, veuillez voir aux pages 4-5.

- EN Carbide for brazed tools - Carbide grades and their applications
 DE Hartmetall für gelötete Fräser - Hartmetallsorten und ihre Anwendungen
 FR Plaquettes en carbure à braser - Les nuances de carbures et leurs applications
 IT Metallo duro per frese saldobrasate - I tipi di metallo duro e le loro applicazioni
 ES Metal duro para herramienta soldada - Calidades de metal duro y sus aplicaciones

Plastics Plastik Plastiques Plastica Plásticos	HDF HDF HDF HDF HDF	MDF MDF MDF MDF MDF	Chipboard Spanplatte Panneaux de particule Truciolare Panel de aglomerado	Hardwood Hartholz Bois dur Legno duro Madera dura	Softwood Weichholz Bois tendre Legno tenero Madera blanda	Main usage Hauptverwendung Usage principal Uso principale Uso principal
✓	✓	✓	○	○	☐	EN Bord materials DE Plattenmaterial FR Matériaux de panneaux IT Pannelli ES Materiales de paneles
✓	○	✓	✓	✓	○	EN Abrasive hard woods DE Abrasive Harthölzer FR Bois durs abrasifs IT Legni duri abrasivi ES Madera dura abrasiva
○	○	○	○	✓	✓	EN Softwood and hardwood DE Weich- und Hartholz FR Bois tendre et dur IT Legni teneri e duri ES Madera blanda y dura
○	○	○	✓	✓	✓	EN Universal grade DE Universelle Sorte FR Nuance universelle IT Tipo universale ES Calidad universal
☐	☐	☐	○	✓	✓	EN Wood with knots DE Holz mit Ästen FR Bois avec des noeuds IT Legni nodosi ES Madera con nudos
☐	☐	☐	○	✓	✓	EN Wood DE Holz FR Bois IT Legno ES Madera
☐	☐	☐	☐	✓	✓	EN Wood, higher clearance angles DE Holz, größere Freiwinkel FR Bois, plus grands angles de dépouille IT Legno, angoli di spoglia grandi ES Madera, ángulos largos
☐	☐	☐	☐	○	✓	EN Wood, highest clearance angles DE Holz, größte Freiwinkel FR Bois, le plus grands angles de dépouille IT Legno, angoli di spoglia molto grandi ES Madera, los mayores ángulos

- ✓ best performance
 ✓ very good performance
 ○ acceptable
 ☐ not suitable



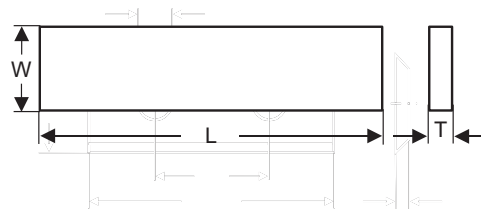
T = 2-4 mm

- EN Carbide strips for brazed cutters
 DE Hartmetallplatten zur Fräserbestückung
 FR Plaquettes en carbure à braser
 IT Placchette in metallo duro per frese
 ES Placas de metal duro para equipar fresas

L mm	W mm	T mm	T04F	T06MF	T07MF-CR <i>New!</i>	T08MF	T10MG
310	2	2					110300
310	4	2	100307	121839	131017	054306	054405
310	5	2	100308	112933	131018	105994	100549
310	6	2	100309	039888	131019	031189	029130
310	8	2	101107	039889	131020	031190	029131
310	10	2	100710	100785	131021	031191	029132
310	12	2	100709	039891	131022	031192	029133
310	14	2	101637	039892	131023	031193	029136
310	15	2	108730	112935	131024	114830	054311
310	16	2	108731	039893	131025	031194	029138
310	18	2	108732	039894	131026	031195	029139
310	20	2	055678	039895	131027	031196	029140
310	22	2	108737	100792	131028	050324	038192
310	25	2	055679	039896	131029	031197	029141
310	30	2	055680	039897	131030	031198	031186
310	3	3					110301
310	5	3	121840	112934	131031	035891	054598
310	6	3	100310	039898	131032	024509	024511
310	8	3	100311	039899	131033	024513	024515
310	10	3	101638	039900	131034	024517	024519
310	12	3	100619	039901	131036	024521	024523
310	13	3	121841	121842	131038	121843	041839
310	14	3	108738	039902	131040	024525	024527
310	15	3	100312	100798	131042	035892	041072
310	16	3	105249	039903	131044	024529	024531
310	18	3	108739	039904	131046	024533	024535
310	20	3	100313	039905	131048	024537	024539
310	25	3	108740	039906	131050	024541	024543
310	30	3	108741	039907	131053	024545	024547
310	4	4					110302
310	8	4	100626	039909	131055	024564	024566
310	10	4	101106	039910	131057	024568	024570
310	12	4	100625	039911	131060	024572	024574
310	14	4	102820	039912	131062	024576	024578
310	15	4	100315	102784	131068	040305	103213
310	16	4	100621	037636	131071	024580	024582
310	18	4	100316	037637	131074	024584	024586
310	20	4	101729	039913	131077	024588	024590
310	22	4	100317	102883	131081	103194	047082
310	25	4	100318	039914	131084	024592	024594
310	28	4	106131	103181	131086	103196	103214
310	30	4	105525	039915	131088	024596	024598
310	35	4	108742	004348	131091	051785	051786

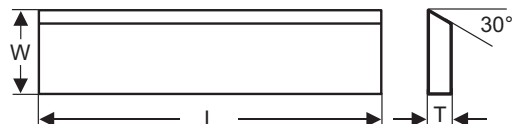
EN Special executions, other tungsten carbide grades and further dimensions upon request.
 DE Sonderausfertigungen, andere Hartmetallsorten und verschiedene Abmessungen auf Anfrage.
 FR Exécutions spéciales, d'autres nuances de carbure et d'autres dimensions sur demande.
 IT Esecuzioni speciali, altri tipi ed ulteriori dimensioni su richiesta.
 ES Ejecuciones especiales, otros calidades y otras dimensiones a petición.

- EN Carbide strips for brazed cutters
 DE Hartmetallplatten zur Fräßerbestückung
 FR Plaquettes en carbure à braser
 IT Placchette in metallo duro per frese
 ES Placas de metal duro para equipar fresas



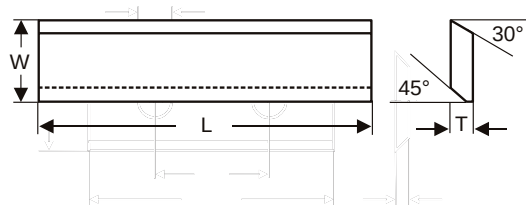
T = 5-6 mm

L mm	W mm	T mm	T04F	T06MF	T07MF-CR <i>New!</i>	T08MF	T10MG
310	5	5					110303
310	8	5	108743	039917	131101	024625	024627
310	10	5	108768	039918	131102	024629	024631
310	12	5	100319	039919	131103	024633	024635
310	14	5	102229	039920	131106	024637	024639
310	15	5	100627	103185	131109	103205	039582
310	16	5	108744	039921	131112	024641	024643
310	18	5	100321	039922	131113	024645	024647
310	20	5	100322	039923	131119	024649	024651
310	25	5	100323	039924	131121	024653	024655
310	30	5	108745	039925	131123	024657	024659
310	35	5	108746	103187	131127	051787	051788
170	40	5	108747	024715	131130	113381	050106
310	10	6		024677	131133		024680
310	16	6		112936	131135		024692
310	20	6		024697	131137		024700
310	25	6		024701	131140		024704
310	30	6		024705	131142		024708



- EN Carbide strips for brazed cutters
 DE Hartmetallplatten zur Fräserbestückung
 FR Plaquettes en carbure à braser
 IT Placchette in metallo duro per frese
 ES Placas de metal duro para equipar fresas

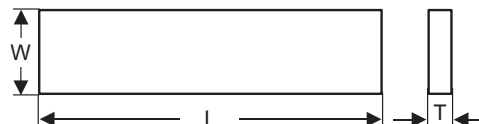
L mm	W mm	T mm	T04F	T06MF	T07MF-CR <i>New!</i>	T08MF	T10MG
310	8	3	108748	039927	131035	024723	024725
310	10	3	108749	039928	131037	024727	024729
310	12	3	108750	039929	131039	024731	024733
310	14	3	108752	039930	131041	024735	024737
310	15	3	108753	115073	131043	038985	041080
310	16	3	108754	039931	131045	024739	024741
310	18	3	108755	039932	131047	024743	024745
310	20	3	108756	039933	131049	024747	024749
310	25	3	108757	039934	131051	024751	024753
310	30	3	108758	039935	131052	024755	024757
310	8	4	108759	039937	131054	024763	024765
310	10	4	108760	039938	131056	024767	024769
310	12	4	108761	039939	131058	024771	024773
310	14	4	108762	039940	131059	024775	024777
310	15	4	108763	039459	131061	049252	041081
310	16	4	108703	039941	131063	024779	024781
310	18	4	108764	039942	131064	024783	024785
310	20	4	102884	039943	131065	024787	024789
310	22	4	102885	035925	131066	049253	041082
310	25	4	102886	039944	131067	024791	024793
310	28	4	102887	035926	131069	049254	041083
310	30	4	108765	039945	131070	024795	024797
310	35	4	108766	100275	131072	051791	041084
310	8	5	108767	039947	131073	024803	024805
310	10	5	108769	039948	131075	024807	024809
310	12	5	108771	039949	131076	024811	024813
310	14	5	108772	039950	131078	024815	024817
310	15	5	108773	103186	131080	103206	103218
310	16	5	108704	039951	131082	024819	024821
310	18	5	108774	039952	131083	024823	024825
310	20	5	108705	039953	131085	024827	024829
310	25	5	108706	039954	131087	024831	024833
310	30	5	108707	039955	131089	024835	024837
310	35	5	108775	100843	131090	051792	051793
170	40	5	115072	025208	131092	029625	029264
310	10	6		024846	131093	024847	024849
310	12	6		039959	131094	024851	024853
310	16	6		039961	131096	024859	024861
310	20	6		039963	131097	024867	024869
310	25	6		039964	131098	024871	024873
310	30	6		039965	131099	024875	024877



EN Carbide strips for brazed cutters
 DE Hartmetallplatten zur Fräserbestückung
 FR Plaquettes en carbure à braser
 IT Placchette in metallo duro per frese
 ES Placas de metal duro para equipar fresas

L mm	W mm	T mm	T04F	T06MF	T07MF-CR <i>New!</i>	T08MF	T10MG
310	8	3	108777	039967	131104	024883	024885
310	10	3	108778	100860	131105	024887	024889
310	12	3	108779	039969	131107	024891	024893
310	14	3	108780	039970	131108	024895	024897
310	15	3	108781	103178	131110		103222
310	16	3	108782	039971	131111	024899	024901
310	18	3	108783	039972	131114	024903	024905
310	20	3	108784	039973	131115	024907	024909
310	25	3	108785	039974	131117	024911	024913
310	30	3	108786	039975	131118	024915	024917
310	8	4	100629	039977	131120	024929	024931
310	10	4	108787	039978	131122	024933	024935
310	12	4	103853	039979	131124	024937	024939
310	14	4	102230	039980	131125	024941	024943
310	15	4	108788	103175	131128	035893	050690
310	16	4	103854	039981	131129	024945	024947
310	18	4	108789	039982	131131	024949	024951
310	20	4	108790	039983	131132	024953	024955
310	22	4	108791	102675	131134	103195	103223
310	25	4	108792	100875	131136	024957	024959
310	28	4	108793	102677	131138	103198	101527
310	30	4	108794	039985	131139	024961	024963
310	35	4	108797	100877	131141	050600	051797
310	8	5	108798	039987	131151	024976	024978
310	10	5	054402	039988	131153	024980	024982
310	12	5	055663	039990	131154	024984	024986
310	14	5	102563	039991	131156	024988	024990
310	15	5	100628	100882	131158	035894	035897
310	16	5	106180	039992	131159	024992	024994
310	18	5	004371	039993	131161	024996	024998
310	20	5	054231	039994	131163	025000	025002
310	25	5	054439	039995	131165	025004	025006
310	30	5	054677	039996	131166	025008	025010
310	35	5	056072	054692	131168	051798	051799
170	40	5	053297	100889	131170	114831	039094
310	10	6	054403	039999	131171	025021	025023
310	12	6	004372	040000	131173	025025	025027
310	16	6	108799	040002	131174	025033	025035
310	20	6	054323	040004	131176	025041	025043
310	25	6	108800	040005	131177	025045	025047
310	30	6	004375	040006	131179	025049	025051

EN Special executions, other tungsten carbide grades and further dimensions upon request.
 DE Sonderausfertigungen, andere Hartmetallsorten und verschiedene Abmessungen auf Anfrage.
 FR Exécutions spéciales, d'autres nuances de carbure et d'autres dimensions sur demande.
 IT Esecuzioni speciali, altri tipi ed ulteriori dimensioni su richiesta.
 ES Ejecuciones especiales, otros calidades y otras dimensiones a petición.



US style

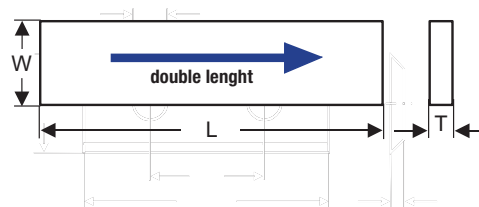
EN STB strips for brazed cutters
 DE Hartmetallplatten zur Fräserbestückung
 FR Plaquettes en carbure à braser
 IT Placchette in metallo duro per frese
 ES Placas de metal duro para equipar fresas

Style	L inch	W inch	T inch	T06MF C3	T07MF-CR New!	T08MF C2	T06M C3-	T10MG C3+	TL15
STB 310	6	5/16	3/32	025066	131143	060188	062487	029145	060397
STB 312	6	3/8	3/32	025070	131144	060189	062390	029149	037315
STB 316	6	1/2	3/32	025075	131145	060190	062244	029154	038661
STB 320	6	5/8	3/32	025080	131146	060191	062183	029159	060398
STB 324	6	3/4	3/32	025085	131147	060371	062245	029164	060399
STB 328	6	7/8	3/32	025090	131148	060192	062246	029169	037316
STB 332	6	1	3/32	025095	131149	060193	062184	029174	037314
STB 336	6	1 1/8	3/32	025100	131150	060194	062247	029179	060400
STB 340	6	1 1/4	3/32	025106	131152	060195	062488	029184	037312
STB 344	6	1 3/8	3/32	060367	131155	060368	062501	060369	060401
STB 348	6	1 1/2	3/32	025112	131157	060196	062489	029190	037313
STB 410	6	5/16	1/8	025067	131160	032651	062490	029146	029367
STB 412	6	3/8	1/8	025071	131162	032621	061884	029150	029371
STB 416	6	1/2	1/8	025076	131164	032622	061779	029155	029376
STB 420	6	5/8	1/8	025081	131167	032623	061778	029160	029381
STB 424	6	3/4	1/8	025086	131169	032624	061780	029165	029386
STB 428	6	7/8	1/8	025091	131172	032625	061781	029170	029391
STB 432	6	1	1/8	025096	131175	032626	061777	029175	029396
STB 436	6	1 1/8	1/8	025101	131178	032627	061782	029180	029401
STB 440	6	1 1/4	1/8	025107	131180	032628	062253	029185	029406
STB 444	6	1 3/8	1/8	025111	131181	032629	062502	029189	031564
STB 448	6	1 1/2	1/8	025113	131182	032630	061783	029191	029411
STB 510	6	5/16	5/32	025068	131183	032631	062505	029147	029368
STB 512	6	3/8	5/32	025072	131184	032632	062506	029151	029372
STB 516	6	1/2	5/32	025077	131185	032633	062507	029156	029377
STB 520	6	5/8	5/32	025082	131186	032634	062508	029161	029382
STB 524	6	3/4	5/32	025087	131187	032635	062509	029166	029387
STB 528	6	7/8	5/32	025092	131188	032636	062510	029171	029392
STB 532	6	1	5/32	025097	131189	032637	062511	029176	029397
STB 536	6	1 1/8	5/32	025102	131190	032638	062512	029181	029402
STB 540	6	1 1/4	5/32	025108	131191	032639	062513	029186	029407
STB 544	6	1 3/8	5/32	060393	131192	060391	062514	060395	060402
STB 548	6	1 1/2	5/32	025114	131193	032640	062515	029192	029412
STB 610	6	5/16	3/16	025069	131194	032641	062516	029148	029369
STB 612	6	3/8	3/16	025073	131195	032642	062517	029152	029373
STB 616	6	1/2	3/16	025078	131196	029663	062518	029157	029378
STB 620	6	5/8	3/16	025083	131197	032643	062519	029162	029383
STB 624	6	3/4	3/16	025088	131198	032644	062520	029167	029388
STB 628	6	7/8	3/16	025093	131199	032645	062521	029172	029393
STB 632	6	1	3/16	025098	131200	032646	062522	029177	029398
STB 636	6	1 1/8	3/16	025103	131201	060197	062523	029182	060403
STB 640	6	1 1/4	3/16	025109	131202	032647	062524	029187	029408
STB 644	6	1 3/8	3/16	060394	131203	060392	062525	060396	060404
STB 648	6	1 1/2	3/16	025115	131204	032648	062526	029193	029413

EN Special executions, other tungsten carbide grades and further dimensions upon request.
 DE Sonderausfertigungen, andere Hartmetallsorten und verschiedene Abmessungen auf Anfrage.
 FR Exécutions spéciales, d'autres nuances de carbure et d'autres dimensions sur demande.
 IT Esecuzioni speciali, altri tipi ed ulteriori dimensioni su richiesta.
 ES Ejecuciones especiales, otras calidades y otras dimensiones a petición.

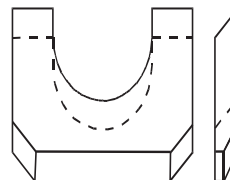
EN DSTB strips for brazed cutters
 DE Hartmetallplatten zur Fräserbestückung
 FR Plaquettes en carbure à braser
 IT Placchette in metallo duro per frese
 ES Placas de metal duro para equipar fresas

New!



US style - double length

Style	L inch	W inch	T inch	T06MF	T07MF-CR <i>New!</i>	T10MG
DSTB 312	12 1/4	3/8	3/32	128446	131322	128447
DSTB 316	12 1/4	1/2	3/32	128448	131323	128449
DSTB 320	12 1/4	5/8	3/32	128450	131324	128451
DSTB 324	12 1/4	3/4	3/32	128452	131327	128453
DSTB 412	12 1/4	3/8	1/8	128454	131328	128455
DSTB 416	12 1/4	1/2	1/8	128456	131329	128457
DSTB 420	12 1/4	5/8	1/8	128458	131330	128459
DSTB 424	12 1/4	3/4	1/8	128460	131331	128461
DSTB 428	12 1/4	7/8	1/8	128462	131332	128463
DSTB 432	12 1/4	1	1/8	128464	131333	128465
DSTB 516	12 1/4	1/2	5/32	128466	131334	128467



- EN Preforms for brazed cutters
 DE Formplatten zum Löten
 FR Plaquettes en carbure à braser
 IT Placchette per frese saldobrasate
 ES Placas para herramientas soldadas

EN Using preformed tips for your brazed cutters you will save the expensive roughing time and grinding wheel cost. TIGRA can supply almost any kind of preformed tip according to the customer's drawing or DXF file. Small quantities for urgent special tools can be delivered by our quick delivery service within one week.

DE Durch die Verwendung vorgeformter Hartmetallplatten sparen Sie teure Schruppzeiten und Kosten für die Schleifscheiben. TIGRA liefert nahezu jede vorgeformte Platte nach Kundenzeichnung oder DXF-Datei. Kleinserien für eilige Sonderwerkzeuge liefert unser Schnelldienst innerhalb von einer Woche.

FR Grâce à l'utilisation de plaquettes en carbure préprofilées, plus besoin de coûteuses opérations de dégrossissage ni des frais élevés pour les meules. TIGRA peut fournir pratiquement n'importe quelle plaquette préprofilée d'après le dessin du client ou un fichier DXF. Notre services d'urgence livre de petites séries pour les outils spéciaux urgents en une semaine.

IT Con l'uso delle placchette presagomate risparmierete non solo la sgrossatura bensì anche i costi delle mole. TIGRA può fornire quasi ogni tipo di placchette presagomate a seconda delle Vostre richieste ed esigenze (documenti DXF; disegni). Per ordini urgenti di piccole quantità riguardanti utensili particolari siamo in grado di fornirvi la merce nell'arco di una settimana.

ES El empleo de placas de metal duro preformadas le permitirá ahorrarse la costosa fase de desbastado y reducir el consumo de muelas. TIGRA puede fabricar prácticamente cualquier tipo de placa preformada en base al plano o fichero DXF del cliente. Si necesitara una herramienta especial con urgencia, nuestro servicio rápido es capaz de fabricar un lote de pocas unidades en una semana.

EN With chamfers in the profile and/or at the bottom.

DE Mit Fasen im Profil und/oder an der Anschlagkante.

FR Avec des biseaux dans le profil et/ou au bord de butée.

IT Con smussi nel profilo e/o nello spigolo di battuta.

ES Con tanto un perfil, como la base biselados.

- EN Profile group 1
 DE Profilgruppe 1
 FR Groupe de profil 1
 IT Gruppo profilo 1
 ES Grupo de perfiles 1



- EN Profile group 2
 DE Profilgruppe 2
 FR Groupe de profil 2
 IT Gruppo profilo 2
 ES Grupo de perfiles 2



- EN Profile group 3
 DE Profilgruppe 3
 FR Groupe de profil 3
 IT Gruppo profilo 3
 ES Grupo de perfiles 3



EN Without any chamfers and therefore less expensive!

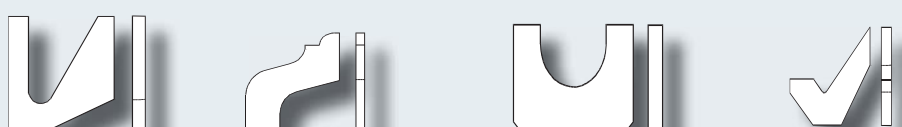
DE Keinerlei Fasen. Der Preis dafür ist deutlich günstiger!

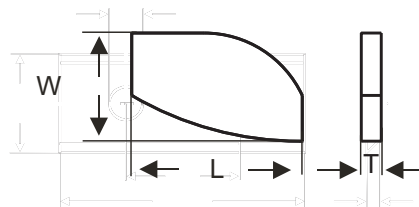
FR Sans des biseaux. Le prix de ce modèle est de ce fait bien plus avantageux!

IT Sprovisto di smussi ha pertanto un prezzo notevolmente inferiore!

ES Ningun bisel. El precio de este modelo sera muy ventajoso para vds!

- EN Profile group 4
 DE Profilgruppe 4
 FR Groupe de profil 4
 IT Gruppo profilo 4
 ES Grupo de perfiles 4





- EN Preforms for router bits
- DE Platten für Oberfräser
- FR Plaquettes pour défonceuse
- IT Placchette sagomate per punte
- ES Placas para fresas de cajeadora

EN Carbide tips for router bits are available preformed in almost any sizes or executions, as per customer's drawing or DXF file, also for small quantities. Your production cost for router bits will be reduced by saving the cost for cutting, wire cutting, roughing and diamond wheels. Small quantities for urgent special tools are supplied from our quick delivery service within only one week.

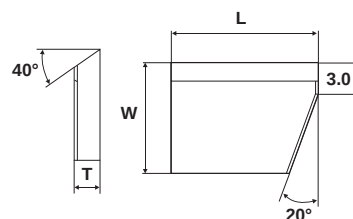
DE Hartmetallplatten für Oberfräser sind vorgeformt in fast allen Größen und Ausführungen nach Kundenzeichnung oder DXF-Datei lieferbar, auch für Kleinserien. So sparen Sie auch bei der Herstellung von Oberfräsern die Kosten für das Trennen, Drahtschneiden oder Schrappen sowie Kosten für Schleifscheiben. Kleinserien für eilige Sonderwerkzeuge liefert unser Schnelldienst innerhalb von einer Woche.

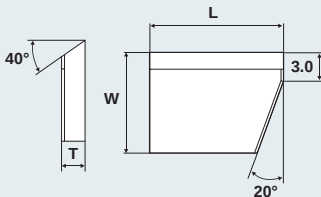
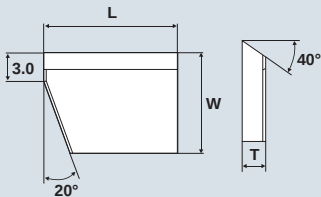
FR Les plaquettes en carbure pour défonceuse peuvent être livrées préfaçonnées dans pratiquement toutes les tailles et exécutions d'après le dessin du client ou un fichier DXF, même en petites séries. Vous économisez ainsi les frais de tronçonnage, de meules abrasives même lors de la fabrication d'outil pour défonceuses. Notre service d'urgence livre de petites séries pour les outils spéciaux urgents en une semaine.

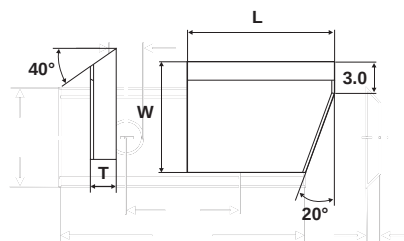
IT Le placchette sagomate per punte sono disponibili in quasi ogni misura secondo disegno o documento DXF, anche in quantità minime. Risparmiate i costi di tagli, sgrossatura e delle mole per la produzione delle punte. Per ordini urgenti di piccole quantità riguardanti utensili particolari siamo in grado di fornirvi la merce in una settimana.

ES Podemos suministrar placas de metal duro preformadas para fresas de cajeadora de cualquier tamaño y modelo en base al plano o diseño en formato DXF del cliente, incluso lotes de volumen reducido. Se ahorrará así las operaciones de corte, electroerosión o debastado y podrá reducir el consumo de muelas. Si necesitara una herramienta especial con urgencia, nuestro servicio rápido es capaz de fabricar un lote de tamaño reducido en una semana.

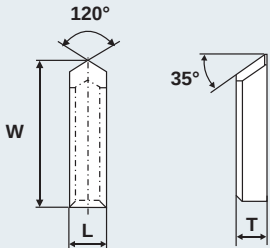
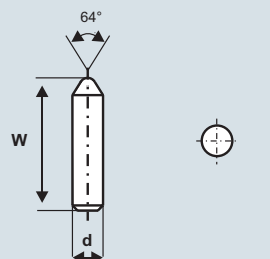
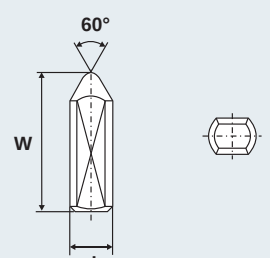
EN Drill bits
 DE Zylinderkopfbohrer
 FR Mèches à façonner
 IT Punte per cerniere
 ES Brocas estrella



	diam	L mm	W mm	T mm	T06MF
 EN left DE links FR gauche IT sinistra ES izquierda	15.0	6.5	8.5	2.5	032657
	16.0	7.0	10.5	2.5	032658
	18.0	8.0	10.5	2.5	032659
	20.0	9.0	10.5	2.5	032660
	22.0	10.0	10.5	2.5	032661
	23.0	10.5	10.5	2.5	032662
	24.0	11.0	10.5	2.5	032663
	25.0	11.5	10.5	2.5	032664
	26.0	12.0	10.5	2.5	032665
	28.0	13.0	10.5	2.5	032666
	30.0	14.0	10.5	2.5	032667
	32.0	15.0	10.5	2.5	032668
	34.0	16.0	10.5	2.5	032669
	35.0	16.5	10.5	2.5	032670
	38.0	18.0	10.5	2.5	032671
	40.0	19.0	10.5	2.5	032672
	45.0	21.5	10.5	2.5	032151
	50.0	24.0	10.5	2.5	032673
	55.0	26.5	10.5	2.5	032674
	60.0	29.0	10.5	2.5	032675
 EN right DE rechts FR droite IT destra ES derecha	15.0	6.5	8.5	2.5	032676
	16.0	7.0	10.5	2.5	032677
	18.0	8.0	10.5	2.5	032678
	20.0	9.0	10.5	2.5	032679
	22.0	10.0	10.5	2.5	032680
	23.0	10.5	10.5	2.5	032681
	24.0	11.0	10.5	2.5	032682
	25.0	11.5	10.5	2.5	032683
	26.0	12.0	10.5	2.5	032684
	28.0	13.0	10.5	2.5	032685
	30.0	14.0	10.5	2.5	032686
	32.0	15.0	10.5	2.5	032687
	34.0	16.0	10.5	2.5	032688
	35.0	16.5	10.5	2.5	032689
	38.0	18.0	10.5	2.5	032690
	40.0	19.0	10.5	2.5	032691
	45.0	21.5	10.5	2.5	032692
	50.0	24.0	10.5	2.5	032693
	55.0	26.5	10.5	2.5	032694
	60.0	29.0	10.5	2.5	032695

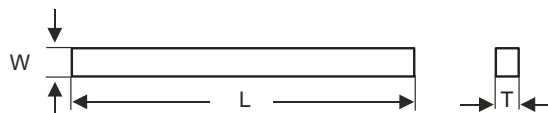


EN Drill bits
DE Zylinderkopfbohrer
FR Mèches à façonner
IT Punte per cerniere
ES Brocas estrella

	d	L mm	W mm	T mm	T06MF
		3.0	12.0	2.5	032702
		4.0	13.0	2.5	032703
	3.0		13.0		055341
	4.0		13.0		032704

EN Finger joint cutters
DE Minizinkenfräser
FR Fraises mini-aboutages
IT Frese per giunzioni
ES Fresas para ensamblar

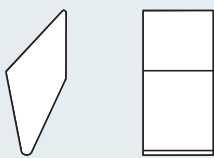
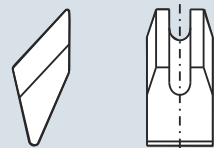
	L mm	W mm	T mm	T08MF	T10MG
	4.5	28.0	4.1	029105	041997
	5.0	28.0	4.1	107858	107859



- EN Tips for T.C.T. knives
 DE Rohlinge für HW-bestückte Messer
 FR Plaquettes pour fabriquer des fers rapportés carbure
 IT Placchette per fabbricare coltelli riportati HW
 ES Placas para equipar cuchillas con metal duro

L mm	W mm	T mm	T10MF
1052	11.2	1.3	114832
1052	11.6	1.6	107063
652	16	2	114834
652	22	2	114835
652	27	2	114836
652	32	2	114837
652	16	2.3	114838
652	22	2.3	114839
652	27	2.3	114840
652	32	2.3	114841

- EN Tips for multicut planers
 DE Zähne für Vielzahnfräser
 FR Dents spéciales
 IT Dentelli per frese multitaglienti
 ES Dientes para fresas multicorte

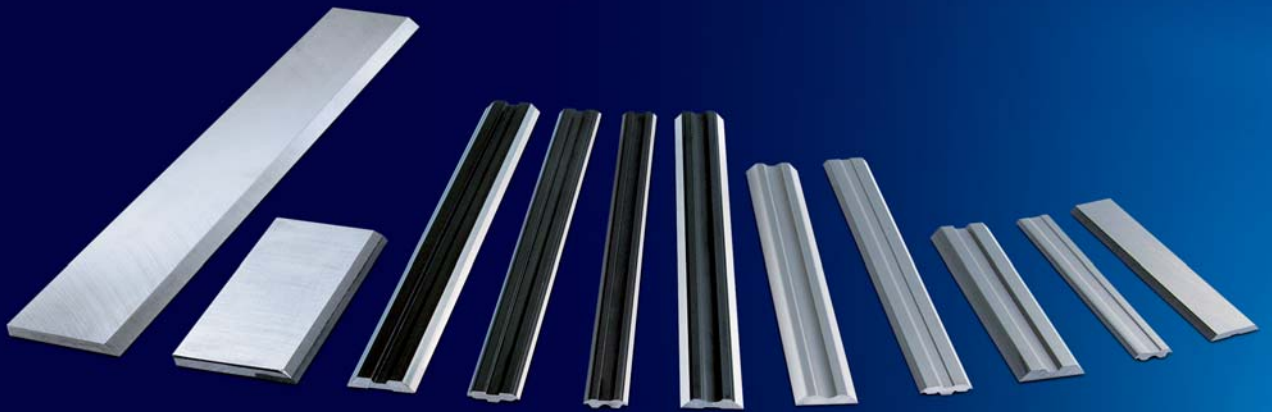
	L mm	W mm	T mm	T10MG
	12.8	6.2	5.3	029090
	12.8	8.2	5.3	114884
	12.8	6.2	5.3	112940

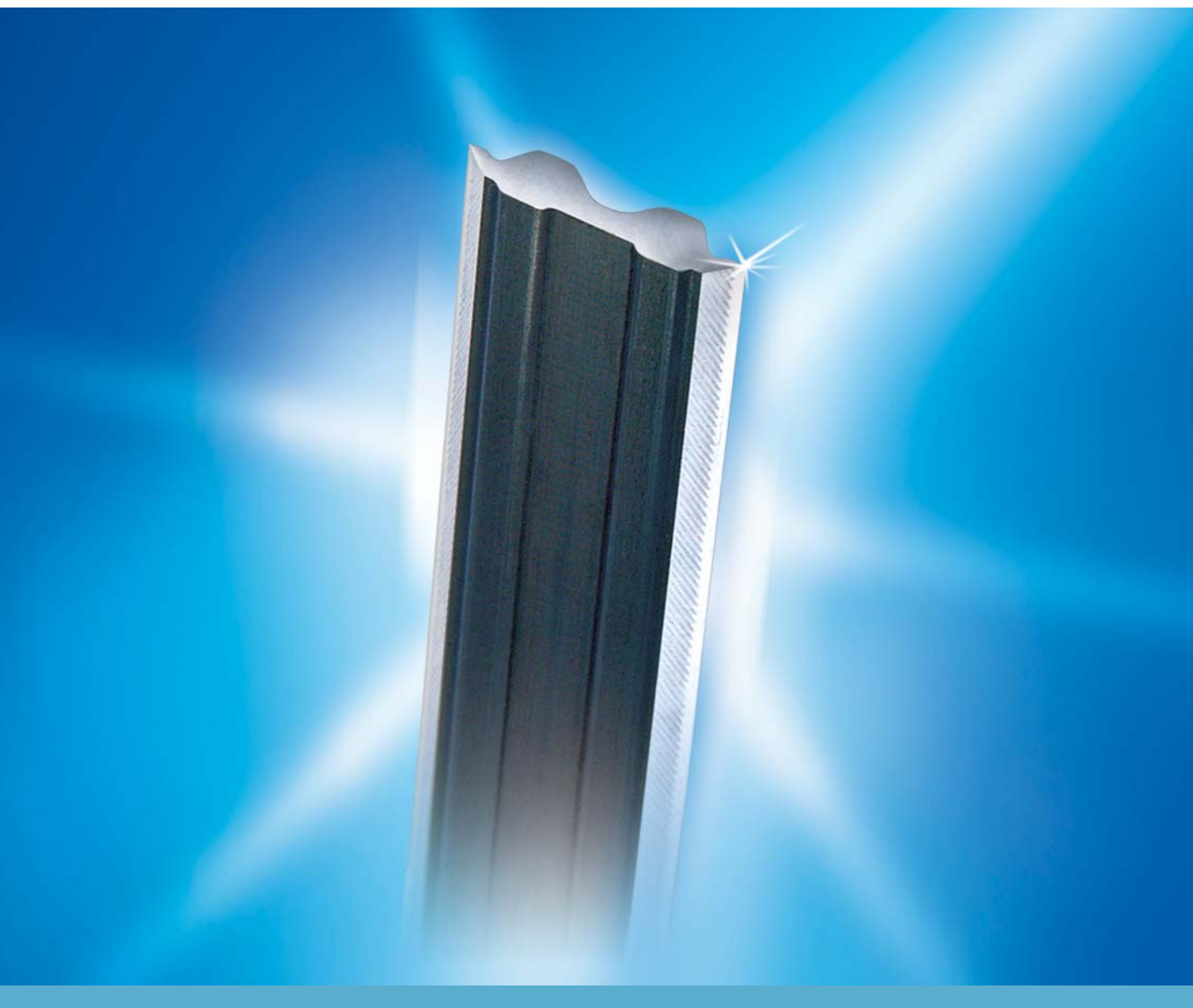


TOOLS CUT BETTER WITH TIGRA



TOOLS CUT BETTER WITH TIGRA



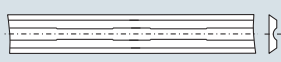
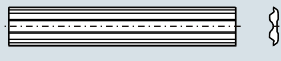
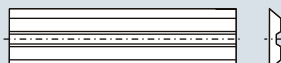
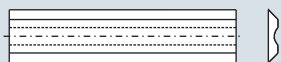
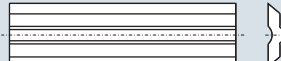
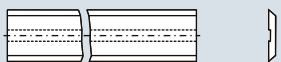
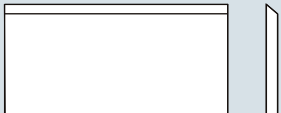
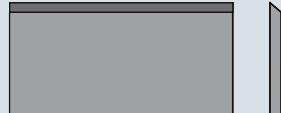


EN Planer knives
DE Hobelmesser
FR Couteaux à raboter
IT Coltelli da pialla
ES Cuchillas para cepillar



TOOLS CUT BETTER WITH TIGRA

EN Planer knives
DE Hobelmesser
FR Couteaux à raboter
IT Coltelli da pialla
ES Cuchillas para cepillar

	- Reversible knives for portable planers - Wendeschneidplatten für Handhobel - Plaquettes pour rabots électro portatils - Coltelli per piallatrici portatili - Cuchillas para acepilladoras electricas	124
	- Planer knives for system Tera - Hobelmesser für System Tera - Couteaux à raboter pour système Tera - Coltelli da pialla per sistema Tera - Cuchillas para cepillar para sistema Tera	125 - 126
	- Planer knives for system Centrolock - Hobelmesser für System Centrolock - Couteaux à raboter pour système Centrolock - Coltelli da pialla per sistema Centrolock - Cuchillas para cepillar para sistema Centrolock	127
	- Planer knives for system Terminus - Hobelmesser für System Terminus - Couteaux à raboter pour système Terminus - Coltelli da pialla per sistema Terminus - Cuchillas para cepillar para sistema Terminus	128
	- Planer knives for system Centroxif / Centrostar / Quickfix - Hobelmesser für System Centroxif / Centrostar / Quickfix - Couteaux à raboter pour système Centroxif / Centrostar / Quickfix - Coltelli da pialla per sistema Centroxif / Centrostar / Quickfix - Cuchillas para cepillar para sistema Centroxif / Centrostar / Quickfix	129
	- Planer knives for system Variplan - Hobelmesser für System Variplan - Couteaux à raboter pour système Variplan - Coltelli da pialla per sistema Variplan - Cuchillas para cepillar para sistema Variplan	130
	- Planer knives for system Sinus - Hobelmesser für System Sinus - Couteaux à raboter pour système Sinus - Coltelli da pialla per sistema Sinus - Cuchillas para cepillar para Sinus	131
	- Planer knives for system Enshin - Hobelmesser für System Enshin - Couteaux à raboter pour système Enshin - Coltelli da pialla per sistema Enshin - Cuchillas para cepillar para sistema Enshin	132
	- Planer knives for system Bulldozer - Hobelmesser für System Bulldozer - Couteaux à raboter pour système Bulldozer - Coltelli da pialla per sistema Bulldozer - Cuchillas para cepillar para sistema Bulldozer	133
	- HSS / Matrix planer knives - HSS / Matrix-Hobelmesser - Fers de raboteuse HSS / Matrix - Coltelli da pialla HSS / Matrix - Cuchillas en HSS / Matrix	134 - 136
	- T.C.T. planer knives - HM-bestückte Hobelmesser - Couteaux à mise rapportée carbure - Coltelli da pialla con metallo duro riportato - Cuchillas con metal duro	137
	- Solid carbide planer knives - Vollhartmetall Hobelmesser - Couteaux à raboter au carbure massif - Coltelli da pialla in HM integrale - Cuchillas metal duro integral	138

- EN Planer knives - Grades and their applications
 DE Hobelmesser - Sorten und ihre Anwendungen
 FR Couteaux à raboter - Les nuances et leurs applications
 IT Coltelli da pialla - I tipi e le loro applicazioni
 ES Cuchillas para cepillar - Calidades y sus aplicaciones

EN DE FR IT ES	TIGRA grade TIGRA - Sorte Nuance TIGRA Tipo TIGRA Calidad TIGRA	Compositon Zusammensetzung Composition Composizione Composición	Hardness Härte Dureté Durezza Dureza	Toughness Zähigkeit Ténacité Tenacità Tenacidad	Bending strength Biegebruchfestigkeit Résistance à la flexion Resistenza flessionale Resistencia a la flexión
	HSS	6% W / M2			
	HSS 18%	18% W / T1			
	HSS M42	M42			
	High Performance Steel	economic steel			
	T.C.T.	carbide tipped / K30 - K40			
	Solid carbide	T10MG			
	Matrix	special coating			

EN For technical data, please refer to the pages 7-8.
 DE Die technischen Daten entnehmen Sie bitte den Seiten 7-8.
 FR Pour les données techniques, veuillez voir aux pages 7-8.

- EN Planer knives - Grades and their applications
 DE Hobelmesser - Sorten und ihre Anwendungen
 FR Couteaux à raboter - Les nuances et leurs applications
 IT Coltelli da pialla - I tipi e le loro applicazioni
 ES Cuchillas para cepillar - Calidades y sus aplicaciones

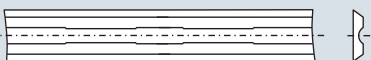
EN	HDF	MDF	Chipboard	Hardwood	Softwood	Main usage
DE	HDF	MDF	Spanplatte	Hartholz	Weichholz	Hauptverwendung
FR	HDF	MDF	Panneaux de particule	Bois dur	Bois tendre	Usage principal
IT	HDF	MDF	Truciolare	Legno duro	Legno tenero	Uso principale
ES	HDF	MDF	Panel de aglomerado	Madera dura	Madera blanda	Uso principal
	—	—	—	✓	✓	EN Standard HSS grade, wood DE Standard-HSS-Sorte, Holz FR Nuance HSS standard, bois IT HSS standard, legno ES Calidad HSS estándar, madera
	—	—	○	✓	✓	EN Best HSS grade, wood DE Beste HSS-Sorte, Holz FR Meilleure nuance HSS, bois IT Migliore HSS, legno ES Mejor calidad HSS, madera
	—	—	—	✓	✓	EN Special HSS grade, wood DE Spezial-HSS-Sorte, Holz FR Nuance HSS spéciale, bois IT HSS speciale, legno ES Calidad HSS especial, madera
	—	—	—	○	✓	EN Softwood, low price demands DE Weichholz, preisgünstig FR Bois tendre, pris bas IT Legni teneri, costo basso ES Madera blanda, bajo costo
	○	✓	✓	✓	○	EN High lifetime demands DE Hohe Standzeitanforderungen FR Applications de durabilité maximisée IT Elevata esigenza di durata ES Para aplicaciones de máxima durabilidad
	✓	✓	✓	✓	✓	EN Highest lifetime demands DE Höchste Standzeitanforderungen FR Très longue durée de vie et nombreux services IT Massima esigenza di durata ES Vida útil muy prolongada
	—	—	—	✓	✓	EN Very long lifetime with multiple resharpening DE Sehr lange Lebensdauer durch mehrfaches Nachschärfen FR Très longue durée de vie et nombreux services IT Durata molto lunga con affilatura multipla ES Muy larga vida útil con múltiple reafilado

- ✓ best performance
 ✓ very good performance
 ○ acceptable
 — not suitable

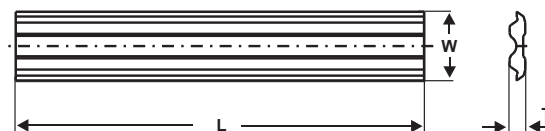
IT Per i dati tecnici, fare riferimento alle pagine 7-8.
 ES Para los datos técnicos, consulte las páginas 7-8.



- EN Reversible knives for portable planers
 DE Wendeschneidplatten für Handhobel
 FR Plaquettes pour rabots électro portatifs
 IT Coltelli per piallatrici portatili
 ES Cuchillas para acepilladoras electricas

	L mm	W mm	T mm	T08MF	
	56.0	5.5	1.1	013041	Adler
	60.0	5.5	1.1	013053	Wegoma
	75.5	5.5	1.1	013001	AEG, Bosch, Festo, Haffner, Kress, Mafell, Metabo, Scheer, Skil, Holz-Her
	78.0	5.5	1.1	013067	Virutex
	92.0	5.5	1.1	013057	AEG, Hitachi, Ryobi
	102.0	5.5	1.1	013061	AEG
	75.7	5.5	1.2	013018	B&D
	80.5	5.5	1.1	013010	ELU
	80.5	5.9	1.2	013043	ELU
	82.0	5.5	1.1	013020	AEG, B&D, Bosch, ALU, Fein, Felisatti, Haffner, Hitachi, Holz-Her, Mafell, Makita, Metabo, Peugeot, Ryobi, Skil
	82.7	5.5	1.1	013032	B&D
	82.0	5.1	1.2	013034	Face groove, Brustnut, Rainure sur grande face, Scanalatura frontale, Ranura frontal

EN System Planer knives
 DE Systemhobelmesser
 FR Couteaux à raboter pour système
 IT Coltelli da pialla per sistema
 ES Cuchillas para cepillar para sistema

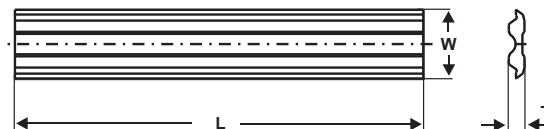


For System Tersa*

L mm	W mm	T mm	T10MG	HSS Standard (M2)	HSS 18% (T1)	HSS M42	High Performance Steel
60.0	10.0	2.3	100847	100395	114482	114539	108320
75.0	10.0	2.3	104212	107545	114483	114540	115104
80.0	10.0	2.3	100848	100396	114484	114541	115105
90.0	10.0	2.3	104398	107546	114485	114542	115106
95.0	10.0	2.3	104211	107547	114486	114543	115107
100.0	10.0	2.3	055509	100397	114487	114544	108321
110.0	10.0	2.3	100849	100398	114488	114545	108322
115.0	10.0	2.3	105071	104630	114489	114546	108323
120.0	10.0	2.3	100851	100399	114490	114547	108324
125.0	10.0	2.3	104022	107548	114491	114548	115108
130.0	10.0	2.3	055510	100400	114492	114549	108325
135.0	10.0	2.3	103823	103821	114493	114550	108326
140.0	10.0	2.3	104766	104613	114494	114551	108327
145.0	10.0	2.3	104210	107549	114495	114552	115109
150.0	10.0	2.3	100852	100401	114496	114553	108328
160.0	10.0	2.3	103943	102716	114497	114554	108329
170.0	10.0	2.3	100853	100402	114498	114555	108330
180.0	10.0	2.3	100854	100403	114499	114556	108331
185.0	10.0	2.3	105070	102774	114500	114557	108332
190.0	10.0	2.3	104399	104808	114501	114558	108333
200.0	10.0	2.3	105698	104243	114502	114559	115121
210.0	10.0	2.3	100855	100404	114503	114560	108334
220.0	10.0	2.3	104589	104566	114504	114561	108335
230.0	10.0	2.3	055511	100405	114505	114562	108337
235.0	10.0	2.3	103824	101718	114506	114563	108338
240.0	10.0	2.3	104043	101720	114507	114564	108339
250.0	10.0	2.3	100856	100406	114508	114565	115110
260.0	10.0	2.3	100857	100407	114509	114566	108340
265.0	10.0	2.3	104573	104326	114510	114567	115111
270.0	10.0	2.3	101673	102982	114511	114568	115112

* EN For use in Tersa-cutterheads only
 * DE Nur zur Verwendung in Tersa-Messerköpfen
 * FR Utilisation limitée aux porte outils de Tersa
 * IT Da usare solo su teste portacoltelli della Tersa
 * ES Sólo para empleo con portacuchillas de Tersa

EN System Planer knives
 DE Systemhobelmesser
 FR Couteaux à raboter pour système
 IT Coltelli da pialla per sistema
 ES Cuchillas para cepillar para sistema



For System Tersa*

L mm	W mm	T mm	T10MG	HSS Standard (M2)	HSS 18% (T1)	HSS M42	High Performance Steel
280.0	10.0	2.3	100858	100408	114512	114569	115113
300.0	10.0	2.3	100859	100409	114513	114570	108341
310.0	10.0	2.3	055512	100410	114514	114571	108342
320.0	10.0	2.3	107550	104687	114515	114572	108343
330.0	10.0	2.3	100861	100411	114516	114573	108344
350.0	10.0	2.3	100862	100412	114517	114574	108345
360.0	10.0	2.3	100863	100413	114518	114575	115114
400.0	10.0	2.3	100864	100414	114519	114576	108346
410.0	10.0	2.3	055513	100415	114520	114577	108347
415.0	10.0	2.3	107551	105267	114521	114578	115115
420.0	10.0	2.3	100865	100416	114522	114579	108348
430.0	10.0	2.3	055514	100417	114523	114580	108349
450.0	10.0	2.3	100866	100418	114524	114581	108350
500.0	10.0	2.3	100867	100419	114525	114582	108351
510.0	10.0	2.3	055515	100420	114526	114583	108352
520.0	10.0	2.3	055516	100421	114527	114584	108353
530.0	10.0	2.3	100868	100422	114528	114585	108354
540.0	10.0	2.3	100869	100423	114529	114586	115116
600.0	10.0	2.3	104720	103994	114530	114587	108355
610.0	10.0	2.3	055517	100424	114531	114588	108356
630.0	10.0	2.3	055518	100425	114532	114589	108357
635.0	10.0	2.3	102179	103912	114533	114590	108358
640.0	10.0	2.3	100870	100426	114534	114591	108359
650.0	10.0	2.3	055519	100427	114535	114592	108361
710.0	10.0	2.3		114119	114536	114593	115117
810.0	10.0	2.3		113435	114537	114594	115118
1050.0	10.0	2.3		114599	114538	114595	115119
Coil 60 meters				115127	116526	115128	115129
Coil 120 meters				110719	115191	114791	115120
Packing paper coil (60 meters for paired packing)				112874	112874	112874	112874

* EN For use in Tersa-cutterheads only

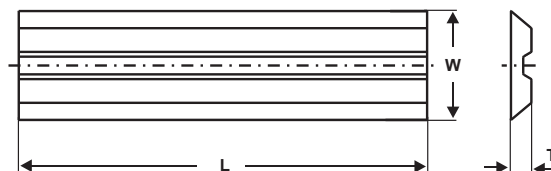
* DE Nur zur Verwendung in Tersa-Messerköpfen

* FR Utilisation limitée aux porte outils de Tersa

* IT Da usare solo su teste portacoltelli della Tersa

* ES Sólo para empleo con portacuchillas de Tersa

EN System Planer knives
 DE Systemhobelmesser
 FR Couteaux à raboter pour système
 IT Coltelli da pialla per sistema
 ES Cuchillas para cepillar para sistema



For System Centrolock*

L mm	W mm	T mm	T10MG	HSS 18% (T1)
10.0	16.0	3.0	102953	114697
20.0	16.0	3.0	100836	114698
30.0	16.0	3.0	102777	114699
40.0	16.0	3.0	102954	114700
50.0	16.0	3.0	102778	114701
60.0	16.0	3.0	100837	114702
65.0	16.0	3.0	107536	114703
80.0	16.0	3.0	100838	114704
100.0	16.0	3.0	055502	114705
115.0	16.0	3.0	106848	114706
130.0	16.0	3.0	055503	114707
140.0	16.0	3.0	107537	114708
150.0	16.0	3.0	100839	114709
160.0	16.0	3.0	105003	114710
170.0	16.0	3.0	055504	114711
180.0	16.0	3.0	100840	114712
190.0	16.0	3.0	100841	114713
210.0	16.0	3.0	100842	114714
220.0	16.0	3.0	107538	114715
230.0	16.0	3.0	054753	114716
235.0	16.0	3.0	100844	114717
240.0	16.0	3.0	055505	114718
260.0	16.0	3.0	100845	114719
270.0	16.0	3.0	055506	114720
300.0	16.0	3.0	102493	114721
310.0	16.0	3.0	100846	114722
460.0	16.0	3.0	055507	114723
650.0	16.0	3.0	055508	114724
710.0	16.0	3.0		114725
810.0	16.0	3.0		114726
1050.0	16.0	3.0		114727

* EN For use in Centrolock-cutterheads only

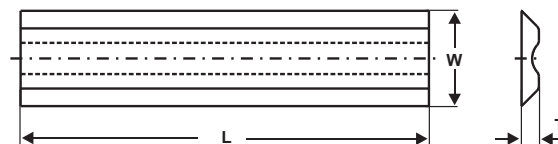
* DE Nur zur Verwendung in Centrolock-Messerköpfen

* FR Utilisation limitée aux porte outils de Centrolock

* IT Da usare solo su teste portacoltelli della Centrolock

* ES Sólo para empleo con portacuchillas de Centrolock

EN System Planer knives
 DE Systemhobelmesser
 FR Couteaux à raboter pour système
 IT Coltelli da pialla per sistema
 ES Cuchillas para cepillar para sistema



For System Terminus*

L mm	W mm	T mm	T10MG	HSS 18% (T1)
50.0	14.0	2.55	100796	114649
60.0	14.0	2.55	100803	114650
80.0	14.0	2.55	100804	114651
100.0	14.0	2.55	100805	114652
110.0	14.0	2.55	100806	114653
120.0	14.0	2.55	100807	114654
130.0	14.0	2.55	055496	114655
136.0	14.0	2.55	107532	114656
140.0	14.0	2.55	100808	114657
150.0	14.0	2.55	100809	114658
160.0	14.0	2.55	100811	114659
170.0	14.0	2.55	100812	114660
180.0	14.0	2.55	100813	114661
190.0	14.0	2.55	100814	114662
200.0	14.0	2.55	100815	114663
210.0	14.0	2.55	100816	114664
220.0	14.0	2.55	100817	114665
230.0	14.0	2.55	054752	114666
240.0	14.0	2.55	100818	114667
250.0	14.0	2.55	100819	114668
255.0	14.0	2.55	107533	114669
260.0	14.0	2.55	100820	114670
270.0	14.0	2.55	100821	114671
275.0	14.0	2.55	107534	114672
280.0	14.0	2.55	100822	114673

L mm	W mm	T mm	T10MG	HSS 18% (T1)
300.0	14.0	2.55	100823	114674
310.0	14.0	2.55	055497	114675
330.0	14.0	2.55	107535	114676
350.0	14.0	2.55	100824	114677
360.0	14.0	2.55	100825	114678
400.0	14.0	2.55	100826	114679
410.0	14.0	2.55	055498	114680
420.0	14.0	2.55	100828	114681
430.0	14.0	2.55	100829	114682
450.0	14.0	2.55	100830	114683
480.0	14.0	2.55	100940	114684
500.0	14.0	2.55	104977	114685
510.0	14.0	2.55	055499	114686
520.0	14.0	2.55	100831	114687
530.0	14.0	2.55	100832	114688
610.0	14.0	2.55	055500	114689
620.0	14.0	2.55	100833	114690
630.0	14.0	2.55	100834	114691
640.0	14.0	2.55	100835	114692
650.0	14.0	2.55	055501	114693
710.0	14.0	2.55		114694
810.0	14.0	2.55		114695
1050.0	14.0	2.55		114696

* EN For use in Terminus-cutterheads only

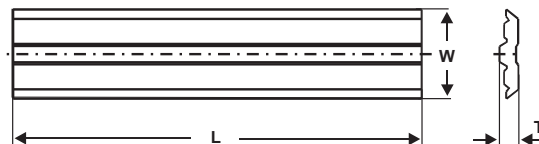
* DE Nur zur Verwendung in Terminus-Messerköpfen

* FR Utilisation limitée aux porte outils de Terminus

* IT Da usare solo su teste portacoltelli della Terminus

* ES Sólo para empleo con portacuchillas de Terminus

EN System Planer knives
 DE Systemhobelmesser
 FR Couteaux à raboter pour système
 IT Coltelli da pialla per sistema
 ES Cuchillas para cepillar para sistema

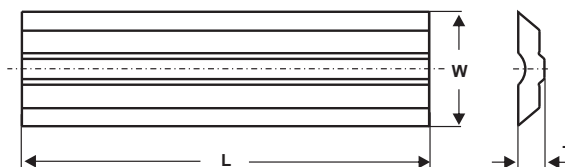


For System Centroxif/
 Centrostar/ Quickfix*

L mm	W mm	T mm	T10MG	HSS Standard (M2)	HSS 18% (T1)
50.0	12.0	2.7	100876	100896	114762
80.0	12.0	2.7	100879	100897	114763
100.0	12.0	2.7	100880	100898	114764
120.0	12.0	2.7	100881	100899	114765
130.0	12.0	2.7	055520	055488	114766
136.0	12.0	2.7	100883	100900	114767
150.0	12.0	2.7	100884	100901	114768
170.0	12.0	2.7	100885	100902	114769
180.0	12.0	2.7	055521	055489	114770
190.0	12.0	2.7	100886	100904	114771
210.0	12.0	2.7	100887	100905	114772
230.0	12.0	2.7	055522	055490	114773
240.0	12.0	2.7	100890	100906	114774
260.0	12.0	2.7	111091	110036	116026
310.0	12.0	2.7	101675	103165	114775
400.0	12.0	2.7	100891	100907	114776
410.0	12.0	2.7	055523	055491	114777
420.0	12.0	2.7	100892	100908	114778
430.0	12.0	2.7	100893	100909	114779
500.0	12.0	2.7	100894	100910	114780
510.0	12.0	2.7	055524	055492	114781
520.0	12.0	2.7	055525	055493	114782
530.0	12.0	2.7	055526	055494	114783
540.0	12.0	2.7	100895	100911	114784
630.0	12.0	2.7	107553	103814	114785
640.0	12.0	2.7	107554	107474	114786
650.0	12.0	2.7	055527	055495	114787
710.0	12.0	2.7		101046	114788
810.0	12.0	2.7		108226	114789
1050.0	12.0	2.7		114760	114790
Coil 60 meters				121137	
Coil 120 meters				112205	
Packing paper coil (60 meters for paired packing)				112877	

* EN For use in Centroxif/Centrostar/Quickfix-cutterheads only
 * DE Nur zur Verwendung in Centroxif/Centrostar/Quickfix-Messerköpfen
 * FR Utilisation limitée aux porte outils de Centroxif/Centrostar/Quickfix
 * IT Da usare solo su teste portacoltelli della Centroxif/Centrostar/Quickfix
 * ES Sólo para empleo con portacuchillas de Centroxif/Centrostar/Quickfix

EN System Planer knives
 DE Systemhobelmesser
 FR Couteaux à raboter pour système
 IT Coltelli da pialla per sistema
 ES Cuchillas para cepillar para sistema

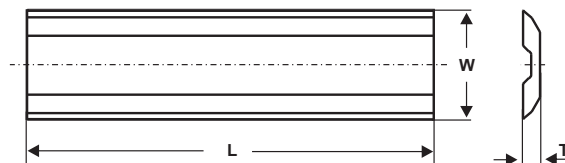


For System Variplan*

L mm	W mm	T mm	T10MG	HSS Standard (M2)
50	16.0	3.7	116764	116737
60	16.0	3.7	116765	116738
80	16.0	3.7	116766	116739
100	16.0	3.7	116767	116740
120	16.0	3.7	116768	116741
130	16.0	3.7	109662	116319
136	16.0	3.7	116769	116742
150	16.0	3.7	116770	116743
170	16.0	3.7	108654	116744
180	16.0	3.7	116771	116745
190	16.0	3.7	116772	116746
210	16.0	3.7	107585	116747
230	16.0	3.7	116773	116320
240	16.0	3.7	116774	116321
400	16.0	3.7	116775	116748
410	16.0	3.7	107586	116322
420	16.0	3.7	116776	116749
430	16.0	3.7	116777	116750
500	16.0	3.7	116778	116751
510	16.0	3.7	116779	116752
520	16.0	3.7	116780	116753
530	16.0	3.7	116781	116754
540	16.0	3.7	116782	116755
600	16.0	3.7	116783	116756
610	16.0	3.7	116784	116757
630	16.0	3.7	116785	116758
640	16.0	3.7	116786	116759
1050	16.0	3.7		115845

* EN For use in Variplan-cutterheads only
 * DE Nur zur Verwendung in Variplan-Messerköpfen
 * FR Utilisation limitée aux porte outils de Variplan
 * IT Da usare solo su teste portacoltelli della Variplan
 * ES Sólo para empleo con portacuchillas de Variplan

EN System Planer knives
 DE Systemhobelmesser
 FR Couteaux à raboter pour système
 IT Coltelli da pialla per sistema
 ES Cuchillas para cepillar para sistema



For System Sinus*

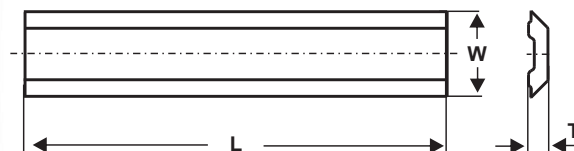
L mm	W mm	T mm	T10MG	HSS 18% (T1)
80	16.0	2.5	116711	130320
100	16.0	2.5	116712	130321
120	16.0	2.5	116713	130322
130	16.0	2.5	116714	130323
140	16.0	2.5	116715	130324
150	16.0	2.5	116716	130325
160	16.0	2.5	116717	130326
180	16.0	2.5	116718	130327
190	16.0	2.5	116719	130328
200	16.0	2.5	116720	130329
210	16.0	2.5	116721	130330
220	16.0	2.5	116722	128352
230	16.0	2.5	116723	128353
235	16.0	2.5		130344
240	16.0	2.5	116724	128354
250	16.0	2.5	116725	130331
260	16.0	2.5	116726	130332
300	16.0	2.5	116727	130333
310	16.0	2.5	116728	130334
400	16.0	2.5	116729	130335
410	16.0	2.5	116730	130336
430	16.0	2.5	116731	130337
500	16.0	2.5	116732	130338
510	16.0	2.5	116733	130339
610	16.0	2.5	116734	130292
630	16.0	2.5	116735	130340
640	16.0	2.5	116736	130341
710	16.0	2.5		130342
1050	16.0	2.5		130343
1350	16.0	2.5		115486

* EN For use in Sinus-cutterheads only
 * DE Nur zur Verwendung in Sinus-Messerköpfen
 * FR Utilisation limitée aux porte outils de Sinus
 * IT Da usare solo su teste portacoltelli della Sinus
 * ES Sólo para empleo con portacuchillas de Sinus

EN System Planer knives
 DE Systemhobelmesser
 FR Couteaux à raboter pour système
 IT Coltelli da pialla per sistema
 ES Cuchillas para cepillar para sistema



For System Enshin*



L mm	W mm	T mm	T10MG
80	12.7	2.7	116794
100	12.7	2.7	116796
130	12.7	2.7	116797
150	12.7	2.7	116798
170	12.7	2.7	116799
180	12.7	2.7	116800
190	12.7	2.7	116801
210	12.7	2.7	116802
230	12.7	2.7	116803
240	12.7	2.7	116804
640	12.7	2.7	116805

L mm	W mm	T mm	HSS Standard (M2)
80	12.0	2.7	116787
100	12.0	2.7	116788
130	12.0	2.7	116316
150	12.0	2.7	116789
170	12.0	2.7	116790
180	12.0	2.7	116317
190	12.0	2.7	116791
210	12.0	2.7	116792
230	12.0	2.7	116318
240	12.0	2.7	116793
1050	12.0	2.7	115846

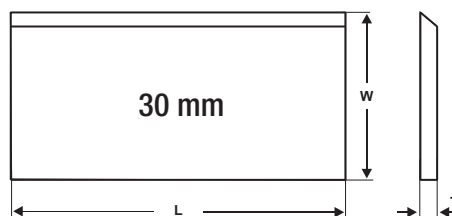
* EN For use in Enshin-cutterheads only
 * DE Nur zur Verwendung in Enshin-Messerköpfen
 * FR Utilisation limitée aux porte outils de Enshin
 * IT Da usare solo su teste portacoltelli della Enshin
 * ES Sólo para empleo con portacuchillas de Enshin

EN System Planer knives
 DE Systemhobelmesser
 FR Couteaux à raboter pour système
 IT Coltelli da pialla per sistema
 ES Cuchillas para cepillar para sistema



For System Bulldozer

L mm	W mm	T mm	T10MG
60.0	13.6	1.8	047422
70.0	13.6	1.8	013728
80.0	13.6	1.8	046288
100.0	13.6	1.8	013713
110.0	13.6	1.8	047423
120.0	13.6	1.8	013715
130.0	13.6	1.8	013716
140.0	13.6	1.8	013723
150.0	13.6	1.8	013718
160.0	13.6	1.8	013726
180.0	13.6	1.8	013719
190.0	13.6	1.8	013725
200.0	13.6	1.8	013720
220.0	13.6	1.8	049247
230.0	13.6	1.8	013721
240.0	13.6	1.8	040337
250.0	13.6	1.8	013722
260.0	13.6	1.8	035440

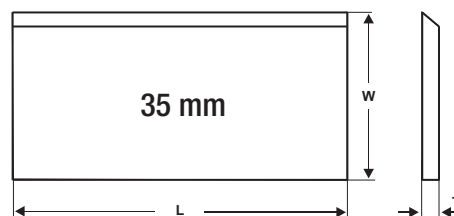


EN HSS/Matrix planer knives
 DE HSS/Matrix Hobelmesser
 FR Fers de raboteuse HSS/Matrix
 IT Coltelli da pialla HSS/Matrix
 ES Cuchillas en HSS/Matrix

L	W	T	HSS	HSS	 Matrix coating technology
mm	mm	mm	Standard (M2)	18% (T1)	
60.0	30.0	3.0	030152	111908	120140
80.0	30.0	3.0	030153	111913	120141
100.0	30.0	3.0	030154	111914	120142
110.0	30.0	3.0	030156	111915	120143
120.0	30.0	3.0	030157	111916	120144
130.0	30.0	3.0	030159	111917	120145
150.0	30.0	3.0	030162	111918	120146
160.0	30.0	3.0	030163	111919	120147
170.0	30.0	3.0	030164	111920	120148
180.0	30.0	3.0	030165	111921	120149
210.0	30.0	3.0	030168	111922	120150
230.0	30.0	3.0	030171	111923	120151
240.0	30.0	3.0	030172	111924	120153
260.0	30.0	3.0	030174	111925	120154
300.0	30.0	3.0	030175	111926	120155
310.0	30.0	3.0	030176	111927	120156
350.0	30.0	3.0	030178	111928	120157
400.0	30.0	3.0	030182	111929	120158
410.0	30.0	3.0	030183	111930	120159
500.0	30.0	3.0	030186	111931	120160
510.0	30.0	3.0	030187	111932	120161
520.0	30.0	3.0	101376	111933	120162
530.0	30.0	3.0	030188	111934	120163
600.0	30.0	3.0	030190	111935	120164
610.0	30.0	3.0	030191	111936	120165
630.0	30.0	3.0	030192	111937	120166
640.0	30.0	3.0	030194	111938	120167
710.0	30.0	3.0	030198	111939	120168
810.0	30.0	3.0	030201	111940	120169
820.0	30.0	3.0	101051	111941	120170
1050.0	30.0	3.0	030249	111942	120171

EN Other dimensions upon request.
 DE Andere Abmessungen auf Anfrage.
 FR D'autres dimensions sur demande.
 IT Altri dimensioni su richiesta.
 ES Otras dimensiones bajo demanda.

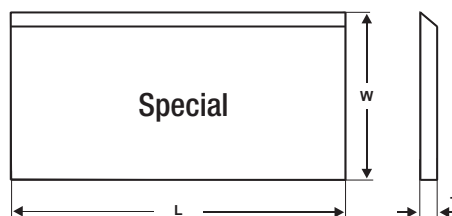
EN HSS/Matrix planer knives
 DE HSS/Matrix Hobelmesser
 FR Fers de raboteuse HSS/Matrix
 IT Coltelli da pialla HSS/Matrix
 ES Cuchillas en HSS/Matrix



L	W	T	HSS	HSS	 Matrix coating technology
mm	mm	mm	Standard (M2)	18% (T1)	
60.0	35.0	3.0	030205	111944	120173
80.0	35.0	3.0	030206	111945	120174
100.0	35.0	3.0	030207	111946	120175
110.0	35.0	3.0	030208	111947	120176
120.0	35.0	3.0	030209	111948	120178
130.0	35.0	3.0	030210	111949	120179
150.0	35.0	3.0	030211	111950	120180
160.0	35.0	3.0	030212	111951	120181
170.0	35.0	3.0	030213	111952	120182
180.0	35.0	3.0	030214	111953	120183
210.0	35.0	3.0	030217	111954	120185
230.0	35.0	3.0	030218	111955	120186
240.0	35.0	3.0	107570	111956	120188
260.0	35.0	3.0	030220	111957	120189
300.0	35.0	3.0	048006	111958	120190
310.0	35.0	3.0	030222	111959	120191
350.0	35.0	3.0	107571	111960	120192
400.0	35.0	3.0	030225	111961	120193
410.0	35.0	3.0	030226	111962	120194
500.0	35.0	3.0	030230	111963	120195
510.0	35.0	3.0	030231	111964	120196
520.0	35.0	3.0	030232	111965	120197
530.0	35.0	3.0	030233	111966	120198
600.0	35.0	3.0	030234	111967	120199
610.0	35.0	3.0	030235	111968	120200
630.0	35.0	3.0	030236	111969	120201
640.0	35.0	3.0	030237	111970	120202
710.0	35.0	3.0	030240	111971	120203
810.0	35.0	3.0	030243	111972	120204
820.0	35.0	3.0	101052	111973	120207
1050.0	35.0	3.0	030252	111974	120208

EN Other dimensions upon request.
 DE Andere Abmessungen auf Anfrage.
 FR D'autres dimensions sur demande.
 IT Altri dimensioni su richiesta.
 ES Otras dimensiones bajo demanda.

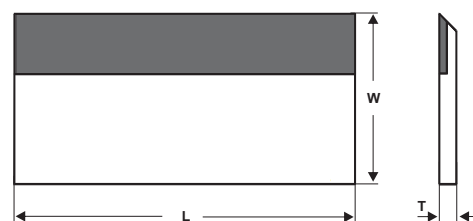
EN HSS/Matrix planer knives
 DE HSS/Matrix Hobelmesser
 FR Fers de raboteuse HSS/Matrix
 IT Coltelli da pialla HSS/Matrix
 ES Cuchillas en HSS/Matrix



EN Special dimensions
 DE Spezialmaße
 FR Dimensions spéciales
 IT Dimensioni speciali
 ES Dimensiones especiales

L	W	T	HSS	HSS	 Matrix coating technology
mm	mm	mm	Standard (M2)	18% (T1)	
1050.0	20.0	2.5	106992	122065	122071
1050.0	25.0	2.5	106994	116185	122072
1050.0	20.0	2.5	106992	122065	122071
1050.0	25.0	2.5	106994	116185	122072

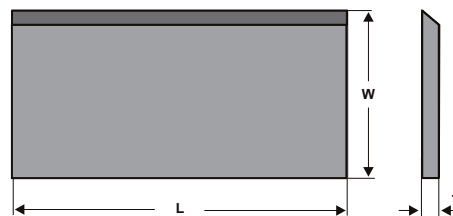
EN T.C.T. planer knives
 DE HM-bestückte Hobelmesser
 FR Couteaux à mise rapportée carbure
 IT Coltelli da pialla con metallo duro riportato
 ES Cuchillas con metal duro



EN metric
 DE metrisch
 FR métrique
 IT metrico
 ES métrico

L mm	T mm	W = 25 mm	W = 30 mm	W = 35 mm
60.0	3.0	114850	029969	030021
80.0	3.0	114851	029970	030022
100.0	3.0	113770	029972	030024
110.0	3.0	114852	029973	030025
120.0	3.0	111723	029974	030026
130.0	3.0	103946	029975	030027
150.0	3.0	105829	029979	030029
160.0	3.0	029943	029980	030030
170.0	3.0	114853	029981	030031
180.0	3.0	105830	029982	030032
200.0	3.0	110737	029986	030034
210.0	3.0	108651	029987	030035
230.0	3.0	112774	029989	030036
240.0	3.0	114854	029991	030038
250.0	3.0	029952	029993	030039
260.0	3.0	104917	029994	030040
270.0	3.0	107022	101697	107555
300.0	3.0	112585	029996	030041
310.0	3.0	029955	029997	030042
330.0	3.0	114855	002238	055837
350.0	3.0	114856	029998	030044
400.0	3.0	029957	029999	107556
410.0	3.0	104919	030001	030047
500.0	3.0	029960	030006	030049
510.0	3.0	104920	030007	030050
520.0	3.0	109690	030009	103998
530.0	3.0	114857	051130	030051
600.0	3.0	112963	030011	030052
610.0	3.0	114858	030012	030054
630.0	3.0	114859	030013	030055
640.0	3.0	114860	030014	030057
680.0	3.0	114861	114849	106194
710.0	3.0	114862	030016	030058
810.0	3.0	029967	030018	030059
820.0	3.0	107126	100445	100446
1010.0	3.0	030128	030131	030137
1050.0	3.0	104830	030132	030138

EN Other dimensions upon request.
 DE Andere Abmessungen auf Anfrage.
 FR D'autres dimensions sur demande.
 IT Altri dimensioni su richiesta.
 ES Otras dimensiones bajo demanda.



EN Solid carbide planer knives
 DE Vollhartmetall Hobelmesser
 FR Couteaux à raboter au carbure massif
 IT Coltelli da pialla in HM integrale
 ES Cuchillas metal duro integral

L mm	W mm	T mm	T10MG
60.0	30.0	3.0	050050
80.0	30.0	3.0	050051
100.0	30.0	3.0	042029
110.0	30.0	3.0	050053
120.0	30.0	3.0	050055
130.0	30.0	3.0	044900
150.0	30.0	3.0	042030
160.0	30.0	3.0	105941
180.0	30.0	3.0	050057
190.0	30.0	3.0	112087
210.0	30.0	3.0	050059
230.0	30.0	3.0	049223
240.0	30.0	3.0	106296
250.0	30.0	3.0	109344
260.0	30.0	3.0	049222
310.0	30.0	3.0	050061
60.0	35.0	3.0	047867
80.0	35.0	3.0	047868
100.0	35.0	3.0	047869
110.0	35.0	3.0	050065
120.0	35.0	3.0	050067
130.0	35.0	3.0	047870
150.0	35.0	3.0	050070
160.0	35.0	3.0	105954
180.0	35.0	3.0	050072
190.0	35.0	3.0	114848
210.0	35.0	3.0	050074
230.0	35.0	3.0	049669
240.0	35.0	3.0	114846
250.0	35.0	3.0	114847
260.0	35.0	3.0	050077
310.0	35.0	3.0	050079

EN Only for use in special clamping systems for carbide knives, not in conventional planing heads!

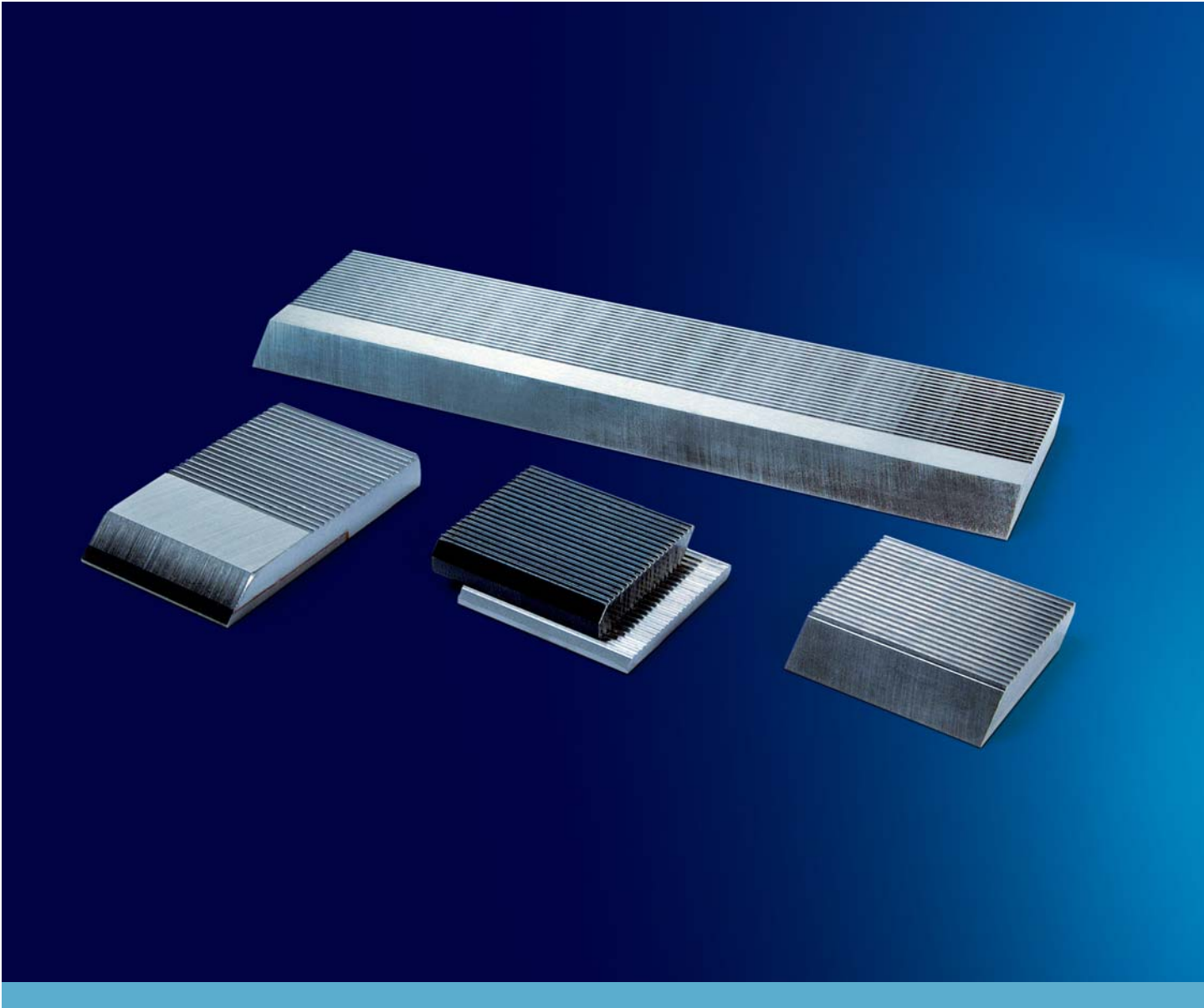
DE Nur in Spezialklemmsystemen für Vollhartmetallhobelmesser einsetzen, nicht in herkömmlichen Hobelköpfen!

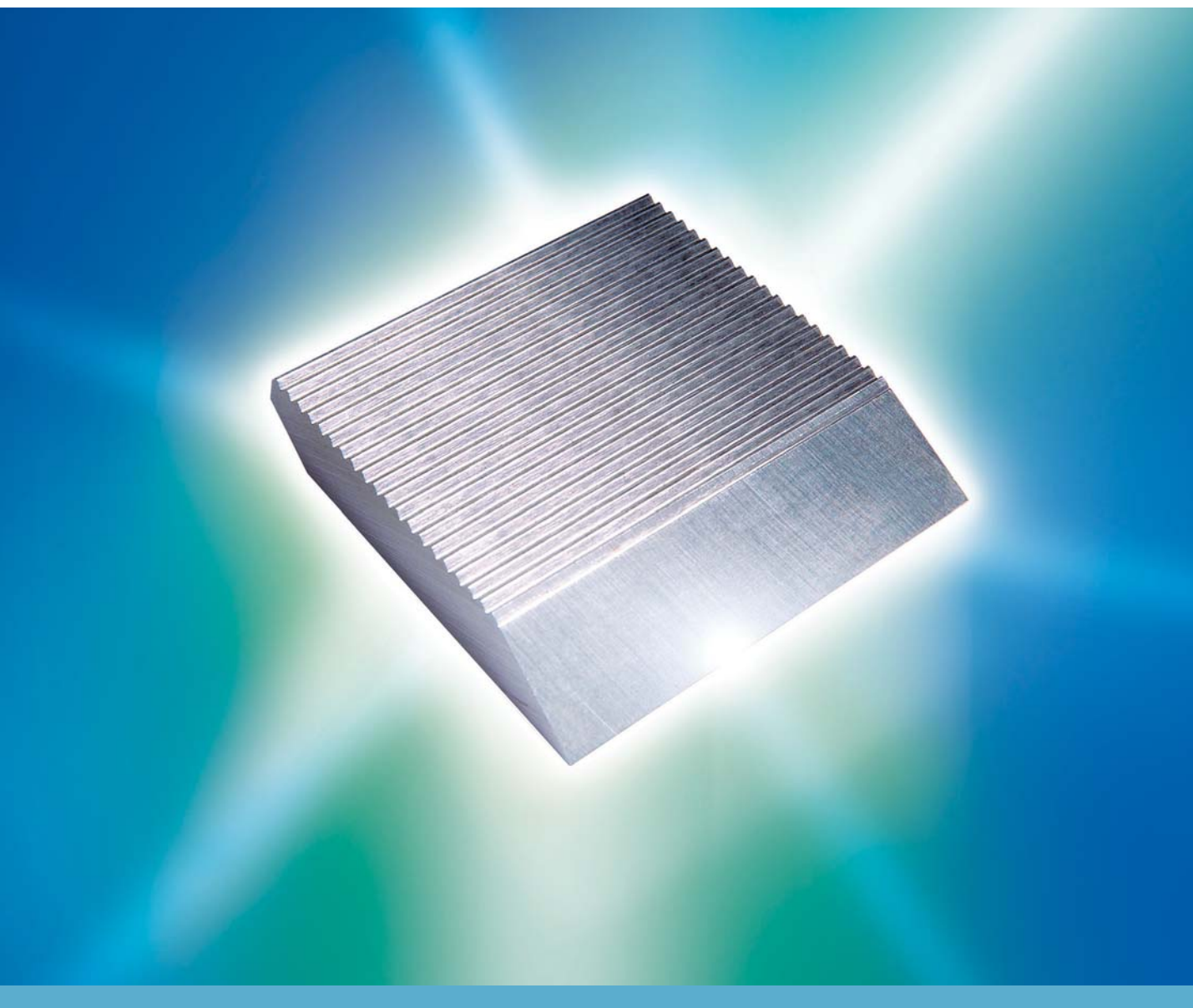


TOOLS CUT BETTER WITH TIGRA



TOOLS CUT BETTER WITH TIGRA



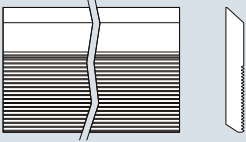
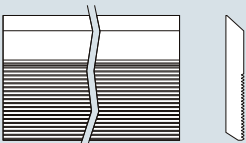
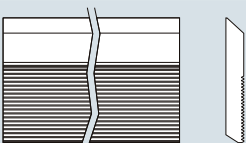
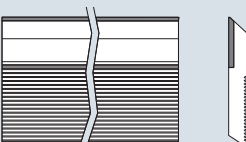
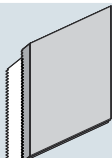


- EN Knives for back corrugated cutterheads
- DE Messer für rückenverzahnte Messerköpfe
- FR Couteaux pour outils crantés
- IT Coltelli per teste con zigrinatura
- ES Cuchillas corrugadas



TOOLS CUT BETTER WITH TIGRA

EN Knives for back corrugated cutterheads
 DE Messer für rückenverzahnte Messerköpfe
 FR Couteaux pour outils crantés
 IT Coltelli per teste con zigrinatura
 ES Cuchillas corrugadas

	EN HSS / High Performance Steel / Matrix blanks, back corrugated DE HSS / High Performance Steel / Matrix Blanketts, rückenverzahnt FR HSS / High Performance Steel / Matrix fers crantés IT HSS / High Performance Steel / Matrix placchette, con zigrinatura ES HSS / High Performance Steel / Matrix cuchillas corrugadas 8 mm 8 mm 8 mm 8 mm 8 mm	146 - 147
	EN HSS blanks, back corrugated DE HSS Blanketts, rückenverzahnt FR HSS fers crantés IT HSS placchette, con zigrinatura ES HSS cuchillas corrugadas 4-6 mm 4-6 mm 4-6 mm 4-6 mm 4-6 mm	148
	EN HSS / High Performance Steel / Matrix blanks, back corrugated DE HSS / High Performance Steel / Matrix Blanketts, rückenverzahnt FR HSS / High Performance Steel / Matrix fers crantés IT HSS / High Performance Steel / Matrix placchette, con zigrinatura ES HSS / High Performance Steel / Matrix cuchillas corrugadas inch	149
	EN T.C.T. blanks, back corrugated DE HM-bestückte Blanketts, rückenverzahnt FR Fers crantés au carbure rapportée IT Placchette con metallo duro riportato, con zigrinatura ES Cuchillas metal duro, corrugadas	150 - 151
	EN SuperPac - T.C. knives and backing plates for back corrugated cutterheads DE SuperPac - HM-Messer und Stützplatten für rückenverzahnte Messerköpfe FR SuperPac - Couteaux au carbure et supports pour outils crantés IT SuperPac - Coltelli HW e supporti per teste con zigrinatura ES SuperPac - Placas de metal duro y placas de apoyo para fresas dentadas	152 - 153

- EN Knives for back corrugated cutterheads - Grades and their applications
 DE Messer für rückenverzahnte Messerköpfe - Sorten und ihre Anwendungen
 FR Couteaux pour outils crantés - Les nuances et leurs applications
 IT Coltelli per teste con zigrinatura - I tipi e le loro applicazioni
 ES Cuchillas corrugadas - Calidades y sus aplicaciones

EN DE FR IT ES	TIGRA grade TIGRA - Sorte Nuance TIGRA Tipo TIGRA Calidad TIGRA	Compositon Zusammensetzung Composition Composizione Composición	Hardness Härte Dureté Durezza Dureza	Toughness Zähigkeit Ténacité Tenacità Tenacidad	Bending strength Biegebruchfestigkeit Résistance à la flexion Resistenza flessionale Resistencia a la flexión
	HSS	HSS 6% (M2)			
	High Performance Steel	economic steel			
	T.C.T.	carbide tipped			
	SuperPac	carbide, various grades			
	Matrix	special coating			

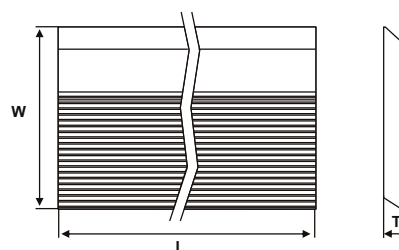
EN For technical data, please refer to the pages 7-8.
 DE Die technischen Daten entnehmen Sie bitte den Seiten 7-8.
 FR Pour les données techniques, veuillez voir aux pages 7-8.

- EN Knives for back corrugated cutterheads - Grades and their applications
 DE Messer für rückenverzahnte Messerköpfe - Sorten und ihre Anwendungen
 FR Couteaux pour outils crantés - Les nuances et leurs applications
 IT Coltelli per teste con zigrinatura - I tipi e le loro applicazioni
 ES Cuchillas corrugadas - Calidades y sus aplicaciones

EN	Plastics	HDF	MDF	Chipboard	Hardwood	Softwood	Main usage
DE	Plastik	HDF	MDF	Spanplatte	Hartholz	Weichholz	Hauptverwendung
FR	Plastiques	HDF	MDF	Panneaux de particule	Bois dur	Bois tendre	Usage principal
IT	Plastica	HDF	MDF	Truciolare	Legno duro	Legno tenero	Uso principale
ES	Plásticos	HDF	MDF	Panel de aglomerado	Madera dura	Madera blanda	Uso principal
	○	■	■	○	✓	✓	EN Universal, small and medium batches DE Universell, Klein- und Mittelserien FR Universel, séries petites et moyennes IT Universale, lotti piccoli e medi ES Universal, pequeños y medianos lotes
	■	■	■	■	○	✓	EN Softwood, low price demands DE Weichholz, preisgünstig FR Bois tendre, prix bas IT Legni teneri, costo basso ES Madera blanda, bajo costo
	✓	○	○	✓	✓	✓	EN Higher lifetime demands, wood, MDF DE Hohe Standzeitanforderungen, Holz, MDF FR Applications de durabilité, bois, MDF IT Elevata esigenza di durata, legno, MDF ES Demandas altas vida de la herramienta, madera, MDF
	✓	✓	✓	✓	✓	✓	EN Highest lifetime demands, multiple resharpening DE Höchste Standzeitanforderungen, mehrfaches Nachschärfen FR Applications de durabilité maximisée et nombreux affûtages IT Massima esigenza di durata, affilatura multipla ES Demandas más exigentes, múltiple reafilado
	○	■	■	■	✓	✓	EN Long lifetime in wood, good resharpening DE Lange Standwege in Holz, gut zum Nachschärfen FR Longue durée de vie en bois, affûtage facile IT Durata lunga in legno, buona affilatura ES Larga vida útil de la madera, afilado fácil

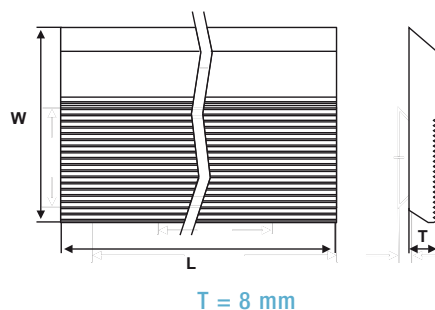
- ✓ best performance
 ✓ very good performance
 ○ acceptable
 ■ not suitable

EN Back corrugated blanks
 DE Rückenverzahnte Blanketts
 FR Fers crantés
 IT Placchette con zigrinatura
 ES Cuchillas corrugadas



T = 8 mm

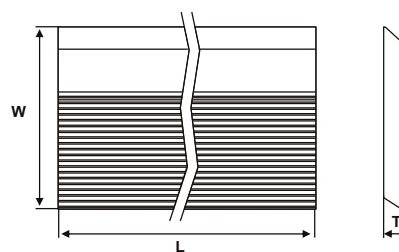
L	W	T	HSS	High Performance Steel	Matrix coating technology
mm	mm	mm			
40.0	40	8.0	030289	103456	120287
50.0	40	8.0	030290	103457	120269
60.0	40	8.0	030291	103458	120270
70.0	40	8.0	030292	103459	120271
80.0	40	8.0	030293	103460	120272
90.0	40	8.0	030294	103461	120273
100.0	40	8.0	030295	103462	120274
110.0	40	8.0	047397	103463	120275
120.0	40	8.0	030296	103464	120276
130.0	40	8.0	030297	103465	120277
150.0	40	8.0	030298	103466	120278
170.0	40	8.0	030299	103467	120279
180.0	40	8.0	030300	103468	120280
200.0	40	8.0	030301	103469	120281
210.0	40	8.0	030302	103470	120282
230.0	40	8.0	030303	103471	120283
260.0	40	8.0	030304	103472	120284
650.0	40	8.0	030306	103473	120285
40.0	50	8.0	030307	103474	120288
50.0	50	8.0	030308	103475	120289
60.0	50	8.0	030309	103476	120290
70.0	50	8.0	030310	103477	120291
80.0	50	8.0	030311	103478	120292
90.0	50	8.0	030312	103479	120293
100.0	50	8.0	030313	103480	120294
110.0	50	8.0	047398	103481	120295
120.0	50	8.0	030314	103482	120296
130.0	50	8.0	030315	103483	120297
150.0	50	8.0	030316	103484	120298
170.0	50	8.0	030317	103485	120299
180.0	50	8.0	030318	103486	120300
200.0	50	8.0	030319	103488	120301
210.0	50	8.0	030320	103489	120302
230.0	50	8.0	030321	103490	120303
260.0	50	8.0	030322	103491	120304
650.0	50	8.0	030324	103492	120305



- EN Back corrugated blanks
 DE Rückenverzahnte Blanketts
 FR Fers crantés
 IT Placchette con zigrinatura
 ES Cuchillas corrugadas

L	W	T	HSS	High Performance Steel	Matrix coating technology
mm	mm	mm			
40.0	60	8.0	030326	103493	120310
50.0	60	8.0	030327	103494	120311
60.0	60	8.0	030328	103495	120312
70.0	60	8.0	030329	103496	120313
80.0	60	8.0	030330	103497	120314
90.0	60	8.0	030331	103498	120315
100.0	60	8.0	030332	103499	120316
110.0	60	8.0	047399	103500	120317
120.0	60	8.0	030333	103501	120318
130.0	60	8.0	030334	103502	120319
150.0	60	8.0	030335	103503	120320
170.0	60	8.0	030336	103504	120321
180.0	60	8.0	030337	103505	120322
200.0	60	8.0	030338	103506	120323
210.0	60	8.0	030339	103507	120324
230.0	60	8.0	030340	103508	120325
260.0	60	8.0	030341	103509	120326
650.0	60	8.0	030344	103510	120327
40.0	70	8.0	030345	103511	120328
50.0	70	8.0	030346	103512	120329
60.0	70	8.0	030347	103513	120330
70.0	70	8.0	030348	103514	120331
80.0	70	8.0	030349	103515	120332
90.0	70	8.0	030350	103516	120333
100.0	70	8.0	030351	103517	120334
110.0	70	8.0	047400	103518	120335
120.0	70	8.0	030352	103519	120336
130.0	70	8.0	030353	103521	120337
150.0	70	8.0	030354	103522	120338
170.0	70	8.0	030355	103523	120339
180.0	70	8.0	030356	103524	120340
200.0	70	8.0	030357	103525	120341
210.0	70	8.0	030358	103526	120342
230.0	70	8.0	030359	103527	120343
260.0	70	8.0	030360	103528	120344
650.0	70	8.0	030362	103529	120345

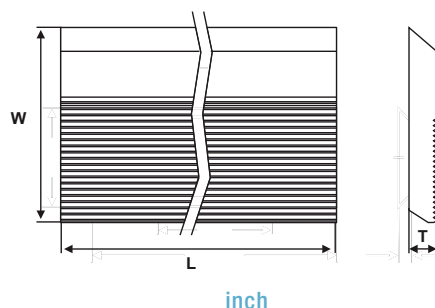
- EN Back corrugated blanks
 DE Rückenverzahnte Blanketts
 FR Fers crantés
 IT Placchette con zigrinatura
 ES Cuchillas corrugadas



T = 4-6 mm

L mm	W mm	T mm	HSS
650.0	30	4.0	104735
650.0	27	5.0	108483
650.0	38	5.0	108522
650.0	45	5.0	108562
650.0	50	5.0	108604
650.0	30	6.0	122082
650.0	40	6.0	051029
650.0	45	6.0	122083
650.0	50	6.0	043807
650.0	60	6.0	043808

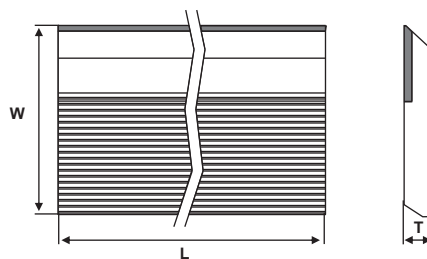
EN Back corrugated blanks
 DE Rückenverzahnte Blanketts
 FR Fers crantés
 IT Placchette con zigrinatura
 ES Cuchillas corrugadas



			HSS (High Speed Steel)		Matrix coating technology
L inch	W inch	T inch	with chamfer	flat bottom	flat bottom
25	1 1/4	5/16	046364	101054	120583
25	1 1/2	5/16	046365	101055	120584
25	1 3/4	5/16	046366	101056	120585
25	2	5/16	046367	101057	120586
25	2 1/4	5/16	046368	101058	120587
25	2 1/2	5/16	046369	101059	120588
25	2 3/4	5/16	046370	101060	120589
25	3	5/16	046371	101061	120590
25	1 1/4	1/4	046372	101062	120591
25	1 1/2	1/4	046373	101063	120592
25	1 3/4	1/4	046374	101064	120593
25	2	1/4	046375	101065	120594
25	2 1/4	1/4	046376	101066	120595
25	2 1/2	1/4	046377	101067	120596
25	1 3/4	3/16	046378	101068	120597
25	2	3/16	046379	101069	120598

			High Performance Steel	
L inch	W inch	T inch	with chamfer	flat bottom
25	1 1/4	5/16	103531	103547
25	1 1/2	5/16	103532	103548
25	1 3/4	5/16	103533	103549
25	2	5/16	103534	103550
25	2 1/4	5/16	103535	103551
25	2 1/2	5/16	103536	103552
25	2 3/4	5/16	103537	103553
25	3	5/16	103538	103554
25	1 1/4	1/4	103539	103555
25	1 1/2	1/4	103540	103556
25	1 3/4	1/4	103541	103557
25	2	1/4	103542	103558
25	2 1/4	1/4	103543	103559
25	2 1/2	1/4	103544	103560
25	1 3/4	3/16	103545	103561
25	2	3/16	103546	103562

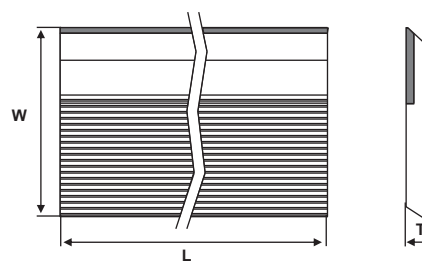
EN Back corrugated blanks
 DE Rückenverzahnte Blanketts
 FR Fers crantés
 IT Placchette con zigrinatura
 ES Cuchillas corrugadas



T.C.T.

L mm	W mm	T mm	Inlay 14 mm	Inlay 20 mm	Inlay 25 mm
40.0	40.0	10.0	103230	103249	
60.0	40.0	10.0	103231	103250	
80.0	40.0	10.0	103232	103251	
100.0	40.0	10.0	103233	103252	
130.0	40.0	10.0	103234	103253	
150.0	40.0	10.0	103235	103254	
180.0	40.0	10.0	103236	103255	
200.0	40.0	10.0	103237	103256	
230.0	40.0	10.0	103238	103257	
260.0	40.0	10.0	103239	103258	
310.0	40.0	10.0	103240	103259	
640.0	40.0	10.0	103241		
650.0	40.0	10.0		101746	
40.0	50.0	10.0	103242	030254	
60.0	50.0	10.0	030255	103261	
80.0	50.0	10.0	030256	103262	
100.0	50.0	10.0	030257	103263	
130.0	50.0	10.0	030258	103264	
150.0	50.0	10.0	103243	103265	
180.0	50.0	10.0	030260	103266	
200.0	50.0	10.0	103244	103267	
230.0	50.0	10.0	103245	103268	
260.0	50.0	10.0	030262	103269	
310.0	50.0	10.0	103246	103270	
560.0	50.0	10.0	103247	103271	
640.0	50.0	10.0	103248		
650.0	50.0	10.0		030264	105661

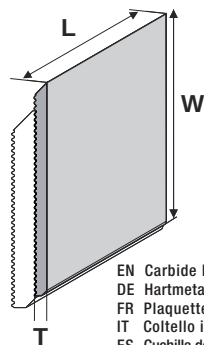
EN Back corrugated blanks
 DE Rückenverzahnte Blanketts
 FR Fers crantés
 IT Placchette con zigrinatura
 ES Cuchillas corrugadas



T.C.T.

L mm	W mm	T mm	Inlay 20 mm	Inlay 25 mm	Inlay 30 mm	Inlay 35 mm
40.0	60.0	10.0	030267	103300	114867	114868
60.0	60.0	10.0	030268	103301	103797	109128
80.0	60.0	10.0	103273	030269	109133	109129
100.0	60.0	10.0	103274	030270	109134	109130
120.0	60.0	10.0	112340	109479	114865	114866
130.0	60.0	10.0	103275	030271	109135	109131
150.0	60.0	10.0	030272	103302	114869	114870
180.0	60.0	10.0	030273	103303	109136	109132
200.0	60.0	10.0	103296	103304	114871	114872
230.0	60.0	10.0	103297	103305	109137	109138
260.0	60.0	10.0	030275	103306	114873	105299
310.0	60.0	10.0	103298	103307	114874	114875
560.0	60.0	10.0	103299	103308	114876	114877
640.0	60.0	10.0	030277	103309	114878	108848
60.0	70.0	10.0			109735	
80.0	70.0	10.0			030280	
100.0	70.0	10.0			030281	
640.0	70.0	10.0			114879	108849

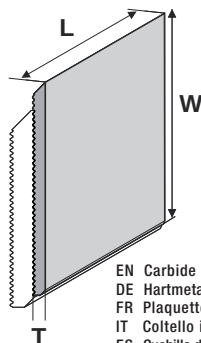
EN TIGRA SuperPac
DE TIGRA SuperPac
FR TIGRA SuperPac
IT TIGRA SuperPac
ES TIGRA SuperPac



EN Carbide blank with corrugated backing plate
DE Hartmetall-Blankett mit rückenverzahnter Stützplatte
FR Plaquette carbure avec porte-plaquette denté
IT Coltello in HM zigrinato con piastrina di supporto zigrinata
ES Cuchilla de metal duro con placa de soporte dentada por el lomo

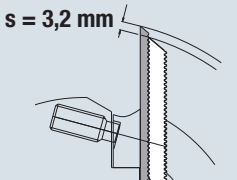
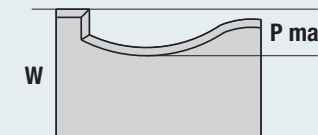
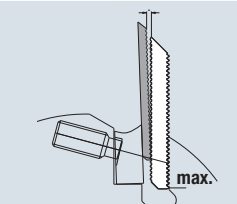
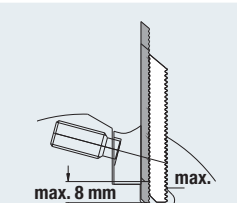
L mm	W mm	T mm	T10MG Standard	T04F Standard	T03SMG Special	L mm	W mm	T mm	EN Backing plate DE Stützplatte
40	38	3.2	043933	024082	024080	40	35	7.1	024090
50	38	3.2	043934	043924	043925	50	35	7.1	043957
60	38	3.2	043935	024115	024113	60	35	7.1	024123
80	38	3.2	043936	024148	024146	80	35	7.1	024156
100	38	3.2	043937	023949	023947	100	35	7.1	023957
120	38	3.2	043938	023982	023980	120	35	7.1	023990
130	38	3.2	043939	024016	024014	130	35	7.1	024024
150	38	3.2	043940	024049	024047	150	35	7.1	024057
170	38	3.2	043962	043961	043960	170	35	7.1	045837
180	38	3.2	113497			180	35	7.1	113484
200	38	3.2	113498	131214		200	35	7.1	113485
210	38	3.2	113499	131216		210	35	7.1	113486
230	38	3.2	113500	131217		230	35	7.1	113487
310	38	3.2	113501	131219		310	35	7.1	112229
330	38	3.2	113502	131220		330	35	7.1	113481
40	50	3.2	043941	024093	024091	40	47	7.1	024101
50	50	3.2	043942	043927	043928	50	47	7.1	043958
60	50	3.2	043943	024126	024124	60	47	7.1	024134
80	50	3.2	043944	024159	024157	80	47	7.1	024167
100	50	3.2	043945	023960	023985	100	47	7.1	023968
120	50	3.2	043946	023993	023991	120	47	7.1	024001
130	50	3.2	043947	024027	024025	130	47	7.1	024035
150	50	3.2	043948	024060	024058	150	47	7.1	024068
170	50	3.2	043966	043965	043964	170	47	7.1	045838
180	50	3.2	113503			180	47	7.1	113488
200	50	3.2	113504	131221		200	47	7.1	113489
210	50	3.2	113505	131222		210	47	7.1	113490
230	50	3.2	113506	131223		230	47	7.1	113491
310	50	3.2	113507	131224		310	47	7.1	112230
330	50	3.2	113508	131225		330	47	7.1	113482

EN TIGRA SuperPac
DE TIGRA SuperPac
FR TIGRA SuperPac
IT TIGRA SuperPac
ES TIGRA SuperPac



EN Carbide blank with corrugated backing plate
DE Hartmetall-Blankett mit rückenverzahnter Stützplatte
FR Plaquette carbure avec porte-plaquette denté
IT Coltello in HM zigrinato con piastrina di supporto zigrinata
ES Cuchilla de metal duro con placa de soporte dentada por el lomo

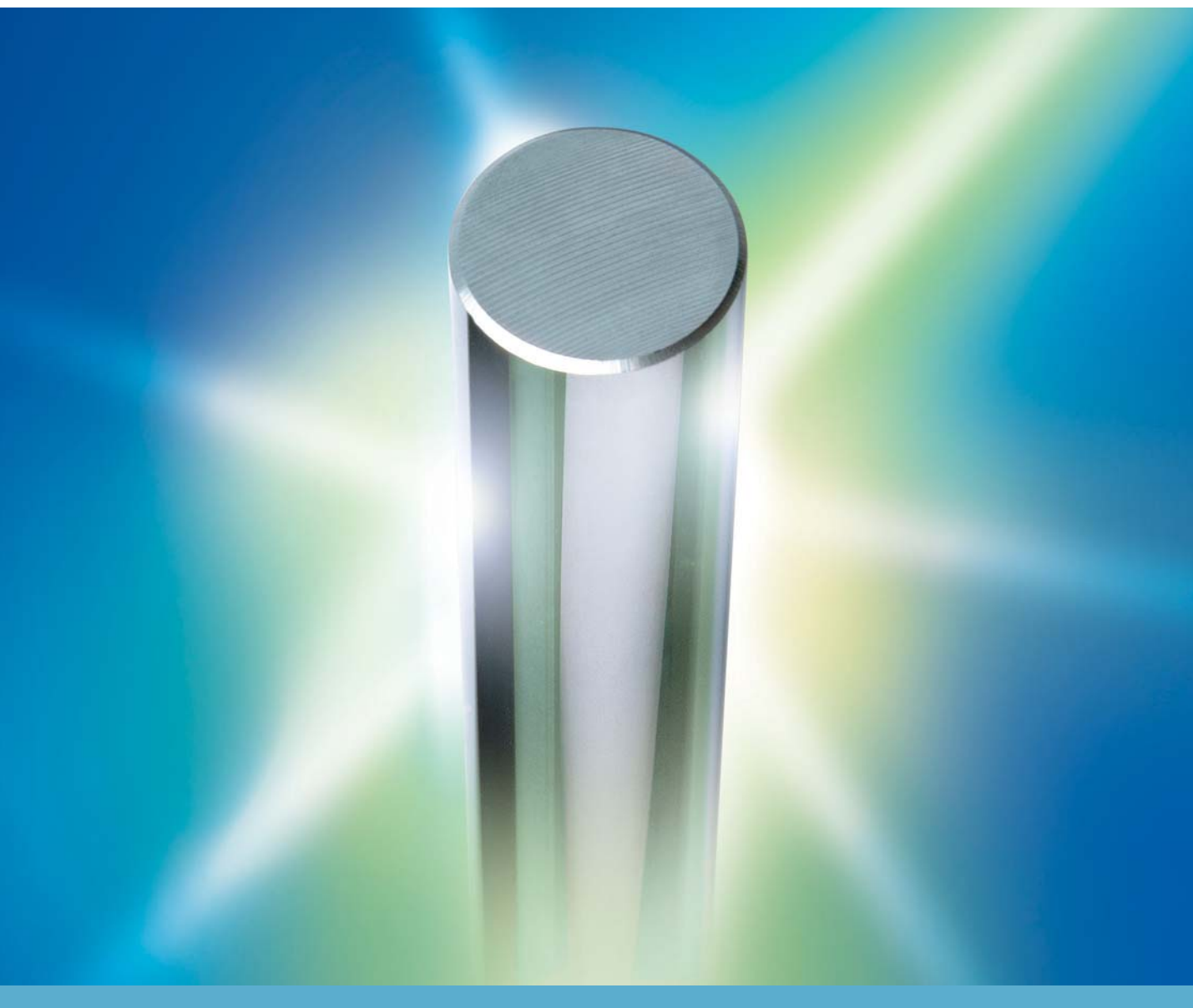
L mm	W mm	T mm	T10MG Standard	T04F Standard	T03SMG Special	L mm	W mm	T mm	Backing plate Stützplatte
40	60	3.2	043949	024104	024102	40	57	7.1	024112
50	60	3.2	043950	043931	043932	50	57	7.1	043959
60	60	3.2	043951	024137	024135	60	57	7.1	024145
80	60	3.2	043952	024170	024168	80	57	7.1	024178
100	60	3.2	043953	023971	023969	100	57	7.1	023979
120	60	3.2	043954	024004	024002	120	57	7.1	024012
130	60	3.2	043955	024038	024036	130	57	7.1	024046
150	60	3.2	043956	024071	024069	150	57	7.1	024079
170	60	3.2	043970	043969	043968	170	57	7.1	045839
180	60	3.2	113509			180	57	7.1	113493
200	60	3.2	113510	131240		200	57	7.1	113494
210	60	3.2	113511	131241		210	57	7.1	113495
230	60	3.2	113512	131243		230	57	7.1	113496
310	60	3.2	113513	131244		310	57	7.1	112231
330	60	3.2	113514	129928		330	57	7.1	113483

	EN Security advices DE Sicherheitshinweise FR Conseils de sécurité	IT Consigli di sicurezza ES Consejo de seguridad								
 s = 3,2 mm	EN Cutting Edge Projection Between carbide blank and backing plate s=3,2 mm (critical dimension when regrinding). DE Schneidenüberstand Schneidenüberstand von Hartmetallplatte zu Stützplatte s=3,2 mm (beim Nachschärfen zu beachten). FR Saillie des plaquettes Les plaquettes carbure dépassent le support de 3,2 mm (à prendre en compte lors du réaffûtage). IT Sporgenza del tagliente Sporgenza del tagliente rispetto alla piastrina di supporto s= 3,2 mm (prestare attenzione in caso di riaffilatura). ES Exceso de corte El exceso de corte desde la placa de metal duro hacia la placa de soporte es e=3,2 mm (obsérvelo cuando se reafila).									
 W P max	EN Maximum Profile Depth DE Maximale Profiltiefe FR Profondeur de profil maximum IT Profondità massima della sagomatura ES Profundidad máxima de perfil	<table><tr><th>W mm</th><th>P max mm</th></tr><tr><td>38</td><td>-</td></tr><tr><td>50</td><td>12</td></tr><tr><td>60</td><td>23</td></tr></table>	W mm	P max mm	38	-	50	12	60	23
W mm	P max mm									
38	-									
50	12									
60	23									
 DANGER	EN Warning! Specifically positioning of blank and support plate; be aware of the safety regulations! DE Warnung! Sitzgenauer Einbau von Blankett und Stützplatte; Sicherheitsbestimmungen beachten! FR Avertissement! Positionnement précis de plaque et porte-plaquette; observez les règles de sécurité! IT Attenzione! Esatto montaggio in sede del coltello e della piastrina di supporto; rispettare le norme di sicurezza! ES Aviso! Específicamente el posicionamiento de la placa en blanco y el apoyo, estar al tanto de las normas de seguridad!									
 DANGER max. 8 mm	EN Warning! Maximum adjustment of blank = 8 mm DE Warnung! Maximale Verstellung des Blanketts = 8 mm FR Avertissement! Ajustement maximum de plaquette = 8 mm IT Attenzione! Regolazione massima della placchetta = 8 mm ES Aviso! El ajuste máximo del espacio en placa = 8 mm									



TOOLS CUT BETTER WITH TIGRA





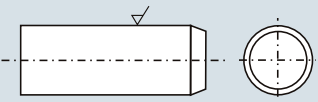
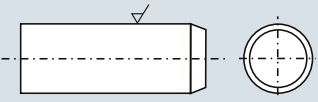
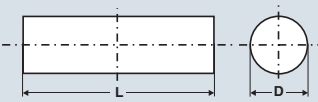
EN Rods
DE Rundstäbe
FR Barreaux cylindriques
IT Cilindri
ES Barras redondas



TOOLS CUT BETTER WITH TIGRA

EN Rods
DE Rundstäbe
FR Barreaux cylindriques
IT Cilindri
ES Barras redondas

New!

	EN Rods - ground DE Rundstäbe - geschliffen FR Barreaux cylindriques - affûtés IT Cilindri - rettificati ES Barras redondas - afilado	<i>metric</i> <i>metrisch</i> <i>métrique</i> <i>metrico</i> <i>métrico</i> 160 - 163
	EN Rods - ground DE Rundstäbe - geschliffen FR Barreaux cylindriques - affûtés IT Cilindri - rettificati ES Barras redondas - afilado	<i>inch</i> 164
	EN TIGRAmet - Heavy alloy tool body blanks DE TIGRAmet - Grundkörperrohlinge aus Schwermetall FR TIGRAmet - Ébauches en métal lourd IT TIGRAmet - Corpo utensile grezzo in metallo pesante ES TIGRAmet - Cuerpos de metal pesado	165

- EN Rods - Carbide grades and their applications
 DE Rundstäbe - Hartmetallsorten und ihre Anwendungen
 FR Barreaux cylindriques - Les nuances de carbures et leurs applications
 IT Cilindri - I tipi di metallo duro e le loro applicazioni
 ES Barras redondas - Calidades de metal duro y sus aplicaciones

EN	TIGRA grade	ISO	USA	Hardness	Toughness	Bending strength
DE	TIGRA - Sorte	ISO	USA	Härte	Zähigkeit	Biegebruchfestigkeit
FR	Nuance TIGRA	ISO	USA	Dureté	Ténacité	Résistance à la flexion
IT	Tipo TIGRA	ISO	Stati Uniti	Durezza	Tenacità	Resistenza flessionale
ES	Calidad TIGRA	ISO	EE.UU.	Dureza	Tenacidad	Resistencia a la flexión
	T03F-CR* old name: T06CR	K01	C4+			
	T06MG	K01 - K10	C3++			
	T10MG UNIVERSAL	K10 - K40	C3+			
	T12SMG	K10 - K40	C1++			

* EN Special binder
 * D Spezialbinder
 * F Liant spécial

* IT Legante speciale
 * ES Composición especial

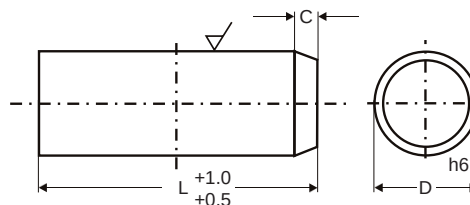
EN For technical data, please refer to the pages 4-5.
 DE Die technischen Daten entnehmen Sie bitte den Seiten 4-5.
 FR Pour les données techniques, veuillez voir aux pages 4-5.

- EN Rods - Carbide grades and their applications
 DE Rundstäbe - Hartmetallsorten und ihre Anwendungen
 FR Barreaux cylindriques - Les nuances de carbures et leurs applications
 IT Cilindri - I tipi di metallo duro e le loro applicazioni
 ES Barras redondas - Calidades de metal duro y sus aplicaciones

Plastics Plastik Plastiques Plastica Plásticos	HDF HDF HDF HDF HDF	MDF MDF MDF MDF MDF	Chipboard Spanplatte Panneaux de particule Truciolare Panel de aglomerado	Hardwood Hartholz Bois dur Legno duro Madera dura	Softwood Weichholz Bois tendre Legno tenero Madera blanda	Main usage Hauptverwendung Usage principal Uso principale Uso principal
✓	✓	✓	✓	✗	✗	EN Highly abrasive materials, boards, larger tool diameters DE Stark abrasive Materialien, Platten, größere Werkzeugdurchmesser FR Matériaux très abrasifs, panneaux, diamètres d'outils plus grands IT Materiali altamente abrasivi, pannelli, utensili di diametro maggiore ES Materiales altamente abrasivos, tabla, diámetros de herramienta más grandes
✓	○	✓	✓	○	✗	EN Harder boards and woods, plastics, graphite, aluminum, larger tool diameters DE Härtere Platten und Holz, Kunststoff, Graphit, Aluminium, größere Werkzeugdurchmesser FR Panneaux durs et bois durs, plastiques, graphite, aluminium, diamètres d'outils plus grands IT Pannelli e legni più duri, plastica, grafite, alluminio, utensili di diametro maggiore ES Tableros y maderas más duras, plásticos, grafito, diámetros de aluminio, la herramienta más grande
○	○	○	○	✓	✓	EN Universal grade DE Universelle Sorte FR Nuance universelle IT Tipo universale ES Calidad universal
○	○	○	○	✓	✓	EN High speed cutting, smaller tool diameters DE Hochgeschwindigkeitsschneiden, kleinere Werkzeugdurchmesser FR Coupe à grande vitesse, diamètres d'outils plus petits IT Taglio ad alta velocità, utensili di diametro più piccolo ES Corte de alta velocidad, los diámetros más pequeños para herramientas

- ✓ best performance
 ✓ very good performance
 ○ acceptable
 ✗ not suitable

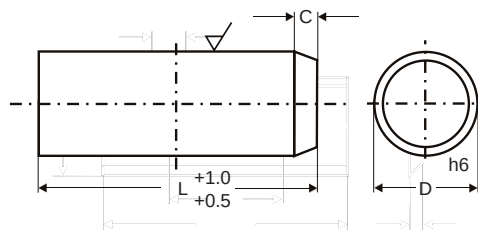
IT Per i dati tecnici, fare riferimento alle pagine 4-5.
 ES Para los datos técnicos, consulte las páginas 4-5.



EN Rods
DE Rundstäbe
FR Barreaux cylindriques
IT Cilindri
ES Barras redondas

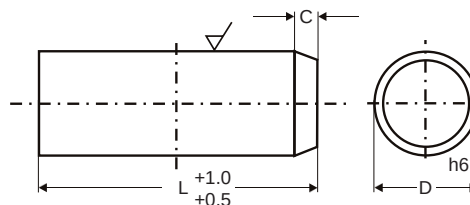
D mm	L mm	C mm	T10MG h6	T06MG h6	T03F-CR (T06CR) h6	T12SMG h6
1.0	330		035517			
1.5	100 330		036366 035518			
2.0	100 330		036368 035519			
2.5	50 100 330		049983 036370 035520			
3.0	38 43 50 330		053363 039162 034177 029708	100980 055446 055445 029707	114916 114915 114914 114910	109912
3.5	330		035521			
4.0	43 50 55 330		039161 034178 039104 029710	106821 034158 101012 029709	114917 114918 114919 114911	109913
4.5	330		035522			
5.0	43 50 330		052459 034179 034802	106780 034159 036541	114920 114921 114912	104207
5.5	330		035523			
6.0	46 50 55 60 70 330	0.4 0.4 0.4 0.4 0.4	102374 043244 039107 034180 043527 029712	106785 106787 101016 034160 106399 029711	114922 114923 114924 114925 114926 114913	101390
6.5	330		035524			
7.0	330		035525	036544	114927	109914
7.5	330		035526			

EN Rods
DE Rundstäbe
FR Barreaux cylindriques
IT Cilindri
ES Barras redondas



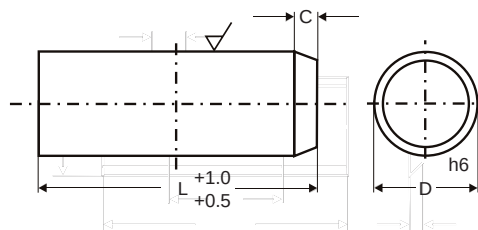
D mm	L mm	C mm	T10MG h6	T06MG h6	T03F-CR (T06CR) h6	T12SMG h6
8.0	50	0.6	045419	106788	114941	
	55	0.6	041602	106789	114942	
	56	0.6	102197	106790	114943	
	60	0.6	046522	102018	114944	
	70	0.6	038349	101017	114945	
	75	0.6	041481	101018	114946	
	80	0.6	034181	034161	114947	
	100	0.6	036392	036391	114948	
	330	0.6	029714	029713	114928	100702
8.5	330		035527			
9.0	330		035528			
9.5	330		035529			
10.0	65	0.6	102514	106791	114951	
	70	0.6	038350	101019	114953	
	75	0.6	038351	055813	114954	
	80	0.6	034182	106402	114955	
	90	0.6	052421	106792	114956	
	100	0.6	034183	036399	114957	
	110	0.6	111134			
	330	0.6	029716	029715	114929	100701
11.0	330		035531			
12.0	80	0.8	034184	053694	114958	
	90	0.8	038352	101020	114959	
	100	0.8	034185	034165	114960	
	110	0.8	052744	106794	114961	
	120	0.8	051331	106795	114962	
	155	0.8	106797	106796	114963	
	330	0.8	029718	029717	114930	100698
13.0	330		035534			

EN Rods
 DE Rundstäbe
 FR Barreaux cylindriques
 IT Cilindri
 ES Barras redondas



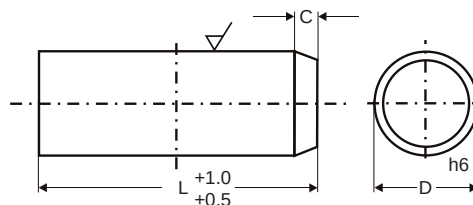
D mm	L mm	C mm	T10MG h6	T06MG h6	T03F-CR (T06CR) h6	T12SMG h6
14.0	90	0.8	041482	101022	114964	109915
	100	0.8	034186	034166	114965	
	110	0.8	038353	101023	114966	
	120	0.8	053659	106801	114967	
	330		029720	029719	114931	
15.0	330		035537			
16.0	80	0.8	052553	106412	114972	103950
	90	0.8	038354	101024	114973	
	93	0.8	106803	106802	114974	
	100	0.8	034187	034167	114975	
	110	0.8	038355	101025	114976	
	120	0.8	034188	034168	114977	
	130	0.8	053858	106805	114978	
	140	0.8	038356	101026	114979	
	150	0.8	043662	103951	114980	
	155	0.8	041603	106806	114981	
	170	0.8	052410	106807	114982	
	175	0.8	053515	106808	114983	
	180	0.8	111133			
	330		029722	029721	114932	
17.0	330		035540			
18.0	93	0.8	106809	106810	114984	109916
	100	0.8	034189	034169	114985	
	110	0.8	102817	106811	114986	
	115	0.8	038357	101027	114987	
	120	0.8	034190	034170	114988	
	330		029724	029723	114933	
19.0	330		035541			
20.0	100	1.0	034192	034172	114989	
	110	1.0	044472	106403	114990	
	115	1.0	038358	101028	114991	
	120	1.0	034193	034173	114992	
	125	1.0	100241	106812	114993	

EN Rods
DE Rundstäbe
FR Barreaux cylindriques
IT Cilindri
ES Barras redondas



D mm	L mm	C mm	T10MG h6	T06MG h6	T03F-CR (T06CR) h6	T12SMG h6
20.0	130	1.0	106044	106813	114994	
	135	1.0	039115	054819	114995	
	140	1.0	038359	101029	114996	
	145	1.0	105702	106814	114997	
	150	1.0	034194	034174	114998	
	155	1.0	100073	106815	114999	
	170	1.0	055570	106816	115000	
	330		029726	029725	114934	109917
21.0	330		035542			
22.0	330		035543	036562	114935	109918
23.0	330		035544			
24.0	330		035545			
25.0	110	1.0	102424	104306	115005	
	125	1.0	106818	106817	115006	
	155	1.0	102765	106819	115007	
	330		029728	029727	114936	109919
26.0	330		035546			
27.0	330		036587			
28.0	330		035547	036566	114937	109920
29.0	330		036589			
30.0	330		035548	036567	114938	
31.0	330		036591			
32.0	330		035549	036568	114939	
35.0	330		035552	036569	114940	

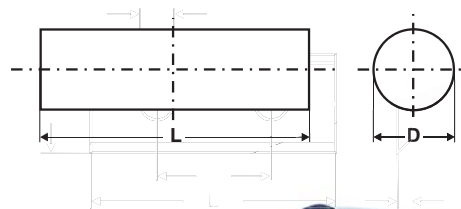
EN Rods
DE Rundstäbe
FR Barreaux cylindriques
IT Cilindri
ES Barras redondas



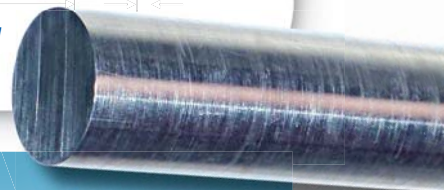
US style
inch

Dia inch	L inch	T10MG h6	T06MG h6	T03F-CR (T06CR) h6
1/8	1 1/2	049465	054851	115022
	2	049466	054852	115023
	2 1/2	049467	054853	115024
	3	050160	054854	115025
	4	049632	054855	115026
	6	049469	054856	115027
	12 1/4	050139	054926	115008
5/32	3	049470	054857	115052
	12 1/4	050140	054927	115009
3/16	1 1/2	049471	054858	115028
	2	049472	054859	115029
	2 1/2	050165	054860	115030
	3	100251		
	12 1/4	050147	054929	115010
7/32	12 1/4	050148	054930	115011
15/64	12 1/4	050149	054931	115012
1/4	1 1/2	049474	054873	115031
	2	049475	054861	115032
	2 1/2	049476	053113	115033
	3	050169	053114	115034
	4	050170	054862	115035
	12 1/4	050150	054821	115013
5/16	2 1/2	054350		
	3 1/2	100287		
	4	100646		
	12 1/4	050151	054933	115014
3/8	2 1/2	049477	054863	115036
	3	049478	053115	115037
	4	049633	054864	115038
	6	049480	054865	115039
	12 1/4	050152	054934	115015
7/16	3	101122		
	6	101668		
	12 1/4	050153	054935	115016

Dia inch	L inch	T10MG h6	T06MG h6	T03F-CR (T06CR) h6
1/2	2	050175	054866	115040
	2 1/2	050176	054867	115041
	3	049481	053116	115042
	3 1/2	045137	053117	115043
	4	049482	054868	115044
	6	101183		
	12 1/4	050154	054936	115017
9/16	12 1/4	050155	054937	115018
5/8	3	049483	054869	115045
	3 1/2	050180	054870	115046
	4	049484	053118	115047
	5	050182	054871	115048
	12 1/4	050156	054939	115019
3/4	4	050183	053119	115049
	5	054148		
	6	055232		
	12 1/4	050157	054822	115020
1	5	050184	054872	115050
	6	100224		
	12 1/4	050158	054824	115021



New!



- EN TIGRAmet - Heavy alloy tool body blanks
 DE TIGRAmet - Grundkörperrohlinge aus Schwermetall
 FR TIGRAmet - Ébauches en métal lourd
 IT TIGRAmet - Corpo utensile grezzo in metallo pesante
 ES TIGRAmet - Cuerpos de metal pesado

D mm	L mm	TIGRAmet
10.2	270	131337
12.2	370	131338
13.2	370	131339
14.2	370	131340
15.2	370	131341
16.7	270 317 370	131342 131343 131344
18.3	270	131345
20.2	650	131346
21.2	650	131347
22.2	650	131348

EN Technical data
 DE Technische Daten
 FR Caractéristiques techniques
 IT Dati tecnici
 ES Datos técnicos

EN Density DE Dichte FR Densité IT Densità ES Densidad	17.1 g/cm ³	0.62 lb/in ³
EN Tungsten content DE Wolframgehalt FR Teneur en tungstène IT Contenuto di tungsteno ES Contenido de tungsteno	90%	90%
EN Binder DE Binder FR Liant IT Legante ES Composicion	Fe, Ni	Fe, Ni
EN Modulus of elasticity DE Elastizitätsmodul FR Module d'élasticité IT Modulo di elasticità ES Módulo de elasticidad	330 GPa	48 (10 ³) ksi
EN Hardness DE Härte FR Dureté IT Durezza ES Dureza	310 HV	31 HRC
EN Ultimate tensile strength DE Zugfestigkeit FR Résistance à la traction IT Resistenza di trazione ES Resistencia a la tracción	875 MPa	127 ksi

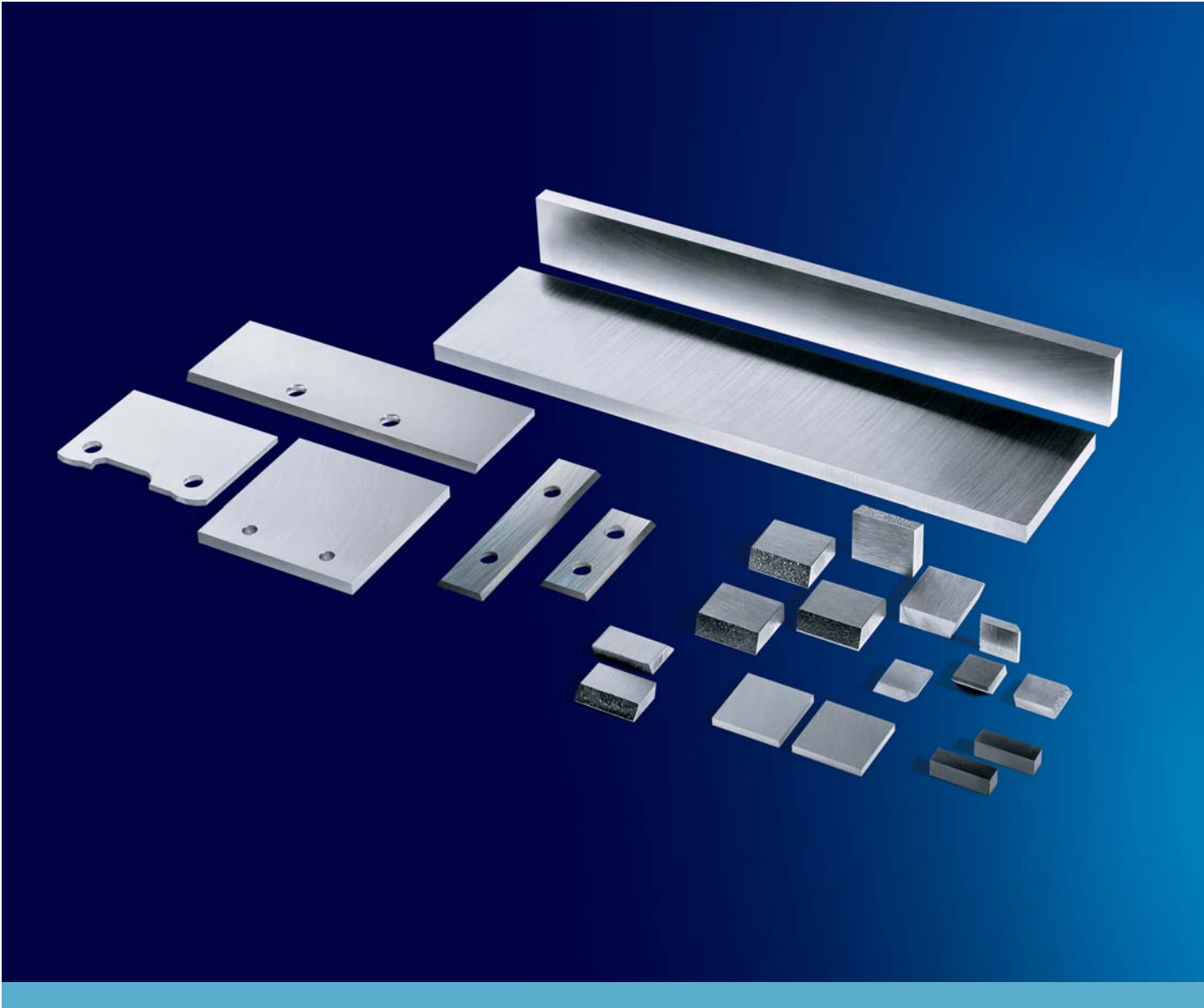
EN Other dimensions upon request.
 DE Andere Abmessungen auf Anfrage.

FR D'autres dimensions sur demande.
 IT Altre dimensioni su richiesta.

ES Otras dimensiones bajo demanda.



TOOLS CUT BETTER WITH TIGRA





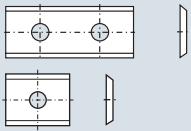
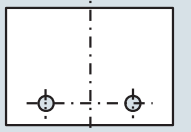
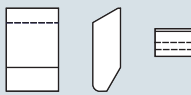
New!

EN TIGRAIloy
DE TIGRAIloy
FR TIGRAIloy
IT TIGRAIloy
ES TIGRAIloy



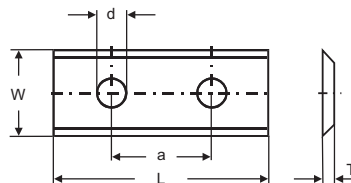
TOOLS CUT BETTER WITH TIGRA

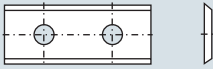
- EN TIGRAIloy Reversible knives, blanks, saw tips and strips
 DE TIGRAIloy Wendeschneidplatten, Blanketts, Sägezähne und Fräserplatten
 FR TIGRAIloy Plaquettes réversibles, plaquettes à profiler, dents de scie et plaquettes à braser
 IT TIGRAIloy Coltelli reversibili, placchette da profilare, dentelli per lame e placchette per frese
 ES TIGRAIloy Cuchillas reversibles, placas para perfilar, dientes de sierra y placas para equipar fresas

	EN TIGRAIloy - Reversible knives DE TIGRAIloy - Wendeschneidplatten FR TIGRAIloy - Plaquettes réversibles IT TIGRAIloy - Coltelli reversibili ES TIGRAIloy - Cuchillas reversibles New!	170
	EN TIGRAIloy - Blanks for profiling DE TIGRAIloy - Blanketts zum Profilieren FR TIGRAIloy - Plaquettes à profiler IT TIGRAIloy - Placchette da profilare ES TIGRAIloy - Placas para perfilar	171 - 173
	EN TIGRAIloy - Saw tips DE TIGRAIloy - Sägezähne FR TIGRAIloy - Dents de scie IT TIGRAIloy - Dentelli per lame ES TIGRAIloy - Dientes de sierra	174
	EN TIGRAIloy - Bars for brazed cutters DE TIGRAIloy - Fräserplatten FR TIGRAIloy - Plaquettes à braser IT TIGRAIloy - Placchette per frese ES TIGRAIloy - Placas para equipar fresas	175 - 176

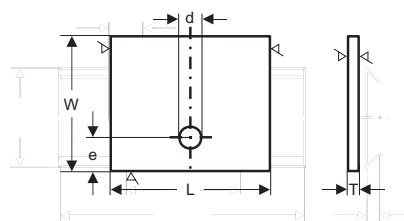
EN TIGRAloy - Reversible knives
 DE TIGRAloy - Wendeschneidplatten
 FR TIGRAloy - Plaquettes réversibles
 IT TIGRAloy - Coltelli reversibili
 ES TIGRAloy - Cuchillas reversibles

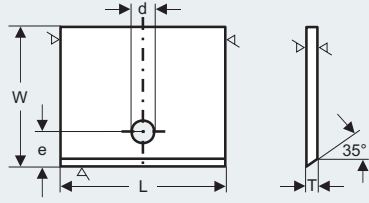
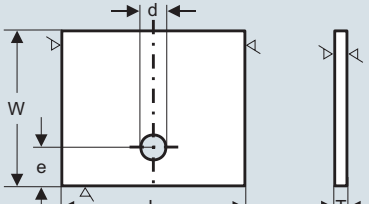
New!



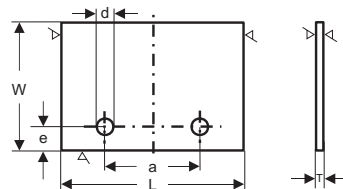
	L mm	W mm	T mm	a mm	TIGRAloy
	20.0	12.0	1.5		131213
	30.0	12.0	1.5	14.0	131229
	40.0	12.0	1.5	26.0	131234
	50.0	12.0	1.5	26.0	131238
	60.0	12.0	1.5	26.0	131239
	80.0	13.0	2.2	60.0	131242
	100.0	13.0	2.2	60.0	131246
	120.0	13.0	2.2	60.0	131248

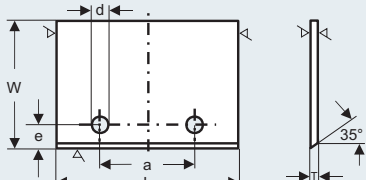
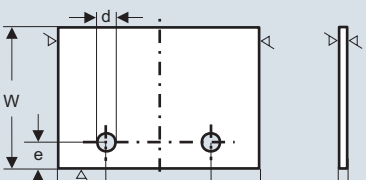
EN TIGRAloy - Blanks for profiling
 DE TIGRAloy - Blanketts zum Profilieren
 FR TIGRAloy - Plaquettes à profiler
 IT TIGRAloy - Placchette da profilare
 ES TIGRAloy - Placas para perfilar



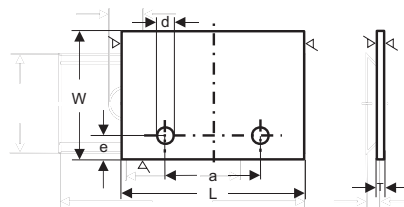
	L	W	T	d		e	TIGRAloy
	mm	mm	mm	mm		mm	
	15.0	20.4	2.0	4.1		6.3	050254
	15.0	25.4	2.0	4.1		6.3	062363
	15.0	30.4	2.0	4.1		6.3	050432
	20.0	20.4	2.0	4.1		6.3	050433
	20.0	25.4	2.0	4.1		6.3	050434
	20.0	30.4	2.0	4.1		6.3	050435
	25.0	20.4	2.0	4.1		6.3	061898
	25.0	25.4	2.0	4.1		6.3	050437
	25.0	30.4	2.0	4.1		6.3	050438
	30.0	25.4	2.0	4.1		6.3	062030
	30.0	30.4	2.0	4.1		6.3	061982
	30.0	35.4	2.0	4.1		6.3	062039
	35.0	30.4	2.0	4.1		6.3	061960
	35.0	35.4	2.0	4.1		6.3	050443
	20.0	20.4	2.0	4.5		6.5	050255
	20.0	25.4	2.0	4.5		6.5	050444
	20.0	30.4	2.0	4.5		6.5	062217
	25.0	25.4	2.0	4.5		6.5	050446
	25.0	30.4	2.0	4.5		6.5	050447
	30.0	30.4	2.0	4.5		6.5	050448

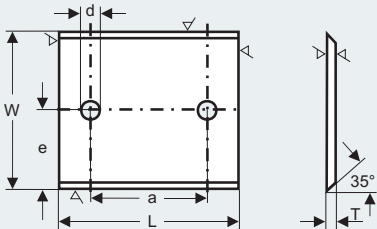
EN TIGRAAlloy - Blanks for profiling
 DE TIGRAAlloy - Blanketts zum Profilieren
 FR TIGRAAlloy - Plaquettes à profiler
 IT TIGRAAlloy - Placchette da profilare
 ES TIGRAAlloy - Placas para perfilar

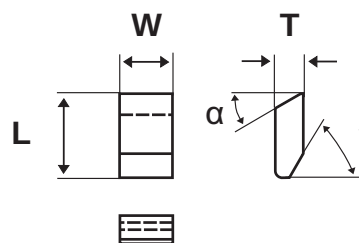


	L mm	W mm	T mm	d mm	a mm	e mm	TIGRAAlloy
	30.0	25.4	2.0	4.1	14.0	6.3	050256
	30.0	30.4	2.0	4.1	14.0	6.3	062258
	30.0	35.4	2.0	4.1	14.0	6.3	062101
	40.0	25.4	2.0	4.1	26.0	5.5	062124
	40.0	30.4	2.0	4.1	20.0	5.5	046483
	40.0	35.4	2.0	4.1	26.0	5.5	046485
	40.0	35.4	2.0	4.1	26.0	6.0	062075
	40.0	35.4	2.0	4.1	26.0	6.3	050453
	40.0	40.4	2.0	4.1	26.0	6.0	062117
	40.0	45.4	2.0	4.1	26.0	6.0	062083
	50.0	16.0	2.0	4.1	26.0	5.5	050456
	50.0	20.0	2.0	4.1	26.0	5.5	050457
	50.0	25.4	2.0	4.1	26.0	5.5	062064
	60.0	25.4	2.0	4.1	26.0	5.5	050459
	60.0	35.4	2.0	4.1	44.0	6.0	062289
	60.0	40.0	2.0	4.1	44.0	6.0	046487
	19.0	30.0	2.0	3.6	8.5	4.75	062277
	30.0	20.4	2.0	4.1	14.0	6.5	050257
	30.0	25.4	2.0	4.1	19.0	4.75	062063
	30.0	25.4	2.0	4.1	14.0	6.5	050464
	30.0	30.4	2.0	4.1	14.0	6.5	050465
	30.0	30.0	2.0	4.1	19.0	4.75	062278
	35.0	25.4	2.0	4.1	14.0	6.5	050467
	35.0	30.4	2.0	4.1	14.0	6.5	062274
	40.0	20.4	2.0	4.1	26.0	6.5	062105
	40.0	25.4	2.0	4.1	26.0	6.5	047452
	40.0	30.4	2.0	4.1	26.0	6.5	050470
	40.0	35.4	2.0	4.1	26.0	5.5	050471
	50.0	20.4	2.0	4.1	26.0	6.5	050472
	50.0	25.4	2.0	4.1	26.0	6.5	050473
	50.0	30.4	2.0	6.0	26.0	6.5	047593
	60.0	20.4	2.0	4.1	26.0	6.5	050474
	60.0	25.4	2.0	4.1	26.0	6.5	050475
	60.0	30.4	2.0	4.1	26.0	6.5	050476

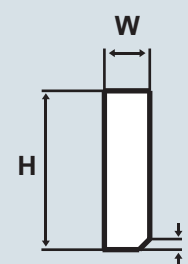
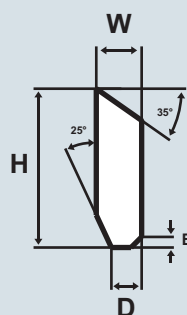
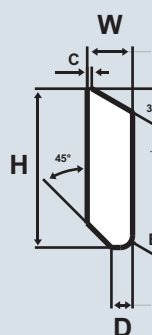
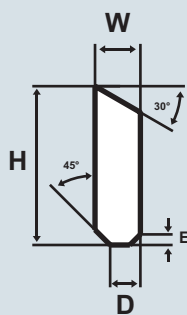
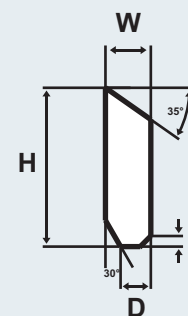
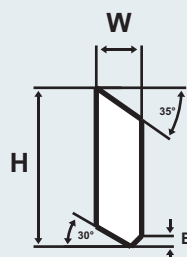
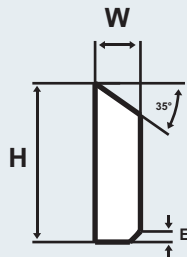
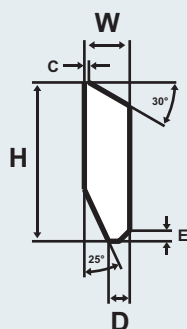
EN TIGRAAlloy - Blanks for profiling
 DE TIGRAAlloy - Blanketts zum Profilieren
 FR TIGRAAlloy - Plaquettes à profiler
 IT TIGRAAlloy - Placchette da profilare
 ES TIGRAAlloy - Placas para perfilar



	L mm	W mm	T mm	d mm	a mm		TIGRAAlloy
	40.0	25.0	2.0	4.1	20.0		050258
	40.0	30.0	2.0	3.5	20.0		050477
	40.0	30.0	2.0	4.1	20.0		050478
	40.0	35.0	2.0	4.1	26.0		047372
	40.0	40.0	2.0	3.5	26.0		050479
	45.0	35.0	2.0	4.1	26.0		046971
	50.0	16.0	2.0	4.1	26.0		050480
	50.0	25.0	2.0	4.1	26.0		050481
	50.0	45.0	2.0	4.1	34.0		050482
	60.0	35.0	2.0	4.1	26.0		046520
	60.0	35.0	2.0	4.1	44.0		047030
	41.0	28.0	1.5				047376
	61.0	31.0	1.5				047377
	61.0	45.0	2.0				047375



- EN TIGRAloy - Saw tips
 DE TIGRAloy - Sägezähne
 FR TIGRAloy - Dents de scie
 IT TIGRAloy - Dentelli per lame
 ES TIGRAloy - Dientes de sierra



EN We supply all kinds of TIGRAloy saw tips. Just give us dimensions and quantities.

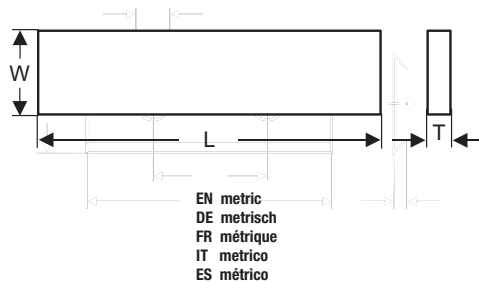
DE Wir beliefern Sie mit allen Arten von TIGRAloy-Sägezähnen. Nennen Sie uns einfach Maße und Bestellmenge.

FR Nous livrons tous les types de dents de scie en TIGRAloy. Donnez-nous les dimensions et les quantités.

IT Forniamo tutti i tipi di dentelli per lame in TIGRAloy. Fateci sapere misure e quantità.

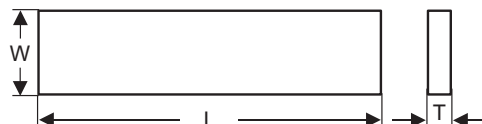
ES Tenemos disponibles todos los tipos de dientes de sierra TIGRAloy. Pueden especificar dimensiones y cantidades.

EN TIGRAIloy - Bars for brazed cutters
 DE TIGRAIloy - Fräserplatten
 FR TIGRAIloy - Plaquettes à braser
 IT TIGRAIloy - Placchette per frese
 ES TIGRAIloy - Placas para equipar fresas



L	W	T	TIGRAIloy
mm	mm	mm	
165	10	3	050137
165	12	3	050138
165	15	3	050185
165	16	3	050186
165	18	3	050187
165	20	3	050188
165	25	3	050189
165	10	4	050190
165	12	4	050191
165	15	4	050192
165	16	4	050193
165	18	4	050194
165	20	4	050195
165	25	4	050196
165	30	4	050197
165	10	5	050199
165	12	5	050200
165	15	5	050201
165	16	5	050202
165	18	5	050203
165	20	5	050204
165	25	5	050205
165	30	5	050206
165	35	5	050207
165	40	5	050209

EN TIGRAIloy - Bars for brazed cutters
 DE TIGRAIloy - Fräserplatten
 FR TIGRAIloy - Plaquettes à braser
 IT TIGRAIloy - Placchette per frese
 ES TIGRAIloy - Placas para equipar fresas



inch

Style	L inch	W inch	T inch	TIGRAIloy
STB 312	6	3/8	3/32	046284
STB 316	6	1/2	3/32	046290
STB 320	6	5/8	3/32	046291
STB 324	6	3/4	3/32	046292
STB 328	6	7/8	3/32	046293
STB 332	6	1	3/32	046294
STB 336	6	1 1/8	3/32	046352
STB 340	6	1 1/4	3/32	046353
STB 348	6	1 1/2	3/32	046354
STB 412	6	3/8	1/8	046295
STB 416	6	1/2	1/8	046296
STB 420	6	5/8	1/8	046297
STB 424	6	3/4	1/8	046298
STB 428	6	7/8	1/8	046299
STB 432	6	1	1/8	046300
STB 436	6	1 1/8	1/8	046454
STB 440	6	1 1/4	1/8	046301
STB 448	6	1 1/2	1/8	046302
STB 510	6	5/16	5/32	046457
STB 512	6	3/8	5/32	046459
STB 516	6	1/2	5/32	046460
STB 520	6	5/8	5/32	046461
STB 524	6	3/4	5/32	046462
STB 528	6	7/8	5/32	046463
STB 532	6	1	5/32	046464
STB 536	6	1 1/8	5/32	046465
STB 540	6	1 1/4	5/32	046466
STB 612	6	3/8	3/16	046469
STB 616	6	1/2	3/16	046470
STB 620	6	5/8	3/16	046471
STB 624	6	3/4	3/16	046472
STB 628	6	7/8	3/16	046473
STB 632	6	1	3/16	050603
STB 636	6	1 1/8	3/16	046474
STB 640	6	1 1/4	3/16	046475
STB 648	6	1 1/2	3/16	046476

EN Description of TIGRAIloy please see page 10.

DE TIGRAIloy-Beschreibung siehe Seite 10.

FR Description de TIGRAIloy s'il vous plaît voir la page 10.

IT Descrizione del TIGRAIloy, vedi pagina 10.

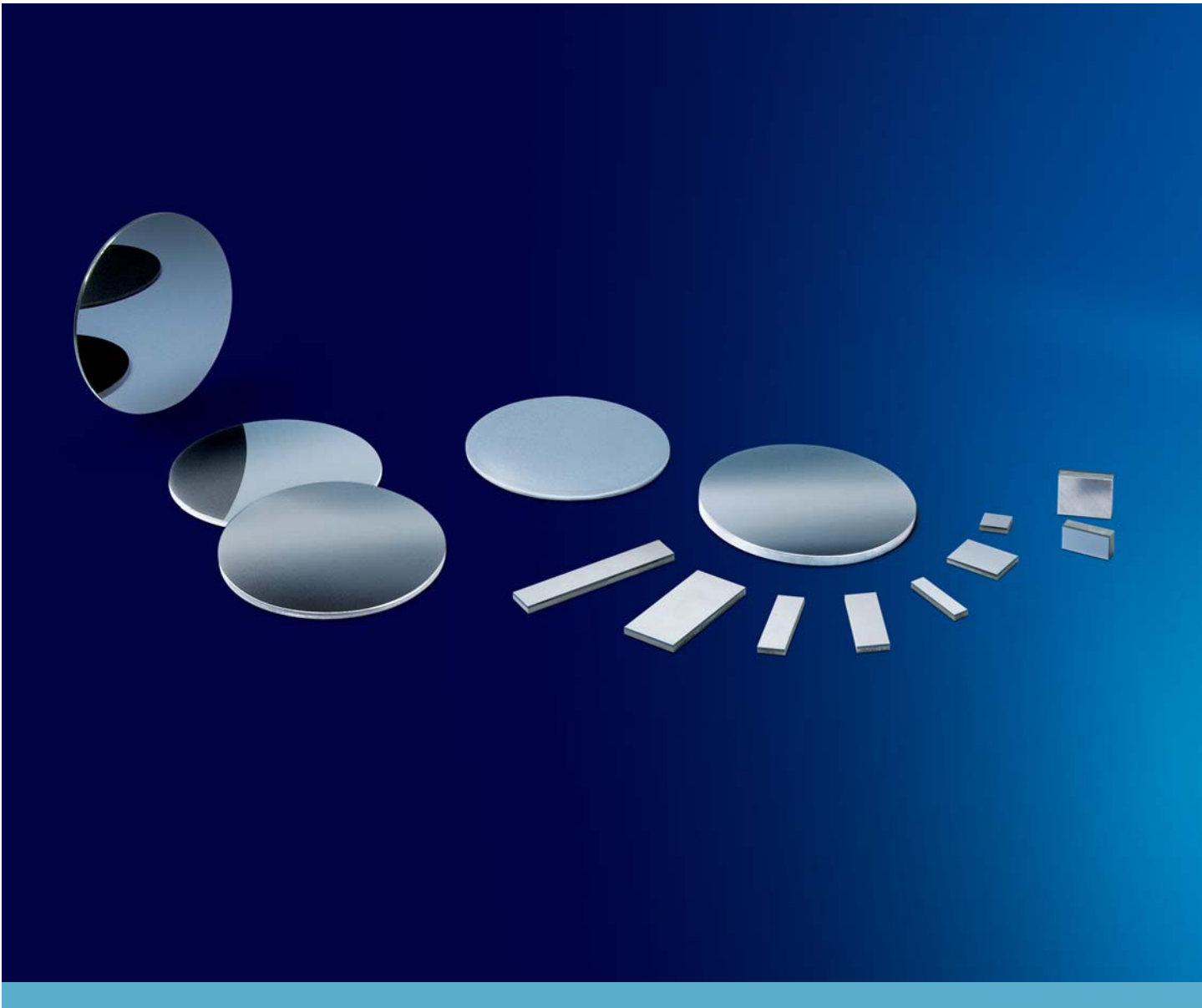
ES Descripción de TIGRAIloy por favor consulte la página 10.



TOOLS CUT BETTER WITH TIGRA



TOOLS CUT BETTER WITH TIGRA





EN PCD - Polycrystalline diamond
DE PKD - Polykristalliner Diamant
FR PCD - Diamant policristallin
IT PCD - Diamante policristallino
ES PCD - Diamante policristalino

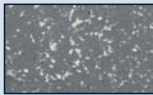


TOOLS CUT BETTER WITH TIGRA

EN PCD - Polycrystalline diamond
 DE PKD - Polykristalliner Diamant
 FR PCD - Diamant policristallin
 IT PCD - Diamante policristallino
 ES PCD - Diamante policristalino

	EN Standard PCD blanks DE Standard-PKD-Ronden FR Rondelles PCD standards IT Dischi standard in PCD ES Rodajas PCD estándar	184
	EN Special PCD blanks DE Spezial-PKD-Ronden FR Rondelles PCD spéciales IT Dischi speciali in PCD ES Rodajas PCD especiales	185
	EN Sandwich PCD - half blanks DE Sandwich-PKD - Halbronden FR Demies rondelles sandwich PCD IT Mezzidischi in Sandwich PCD ES Semirrodajas PCD en sandwich	185

- EN PCD - Polycrystalline diamond - PCD grades and their applications
 DE PKD - Polykristalliner Diamant - PKD-Sorten und ihre Anwendungen
 FR PCD - Diamant policristallin - Les nuances de PCD et leurs applications
 IT PCD - Diamante policristallino - I tipi di PCD e le loro applicazioni
 ES PCD - Diamante policristalino - Calidades de PCD y sus aplicaciones

EN TIGRA grade DE TIGRA - Sorte FR Nuance TIGRA IT Tipo TIGRA ES Calidad TIGRA	Grain size Korngröße Grosueur du grain Groschezza del grano Tamaño del grano (µm)	Grain structure Kornstruktur Structure du grain Groschezza del grano Estructura de grano (µm)	Binder type Binderart Type de liant Tipo legante Tipo de ligante	Diamond content Diamantgehalt Teneur en diamant Contenuti diamante Contenido de diamante	Toughness Zähigkeit Ténacité Tenacità Tenacidad	Bending strength Biegebruchfestigkeit Résistance à la flexion Resistenza flessionale Resistencia a la flexión	Abrasion resistance Verschleißfestigkeit Résistance à l'abrasion Resistenza all'abrasione Resistencia a la abrasión
ES	0.5 - 0.8		standard	standard	↑	↑	→
FS	2 - 4		standard	standard	↙	↑	↙
FX	2 - 4		special	reduced	↙	↑	↙
MS	8 - 10		standard	standard	→	↖	→
MX	8 - 10		special	reduced	→	↖	→
MU	2 - 4 + 8 - 10		ultrahard	very high	↖	→	↑
CS	20 - 35		standard	standard	↑	→	↖
CX	20 - 35		special	reduced	↑	→	↖
CU	2 - 4 + 20 - 35		ultrahard	very high	↑	↙	↑

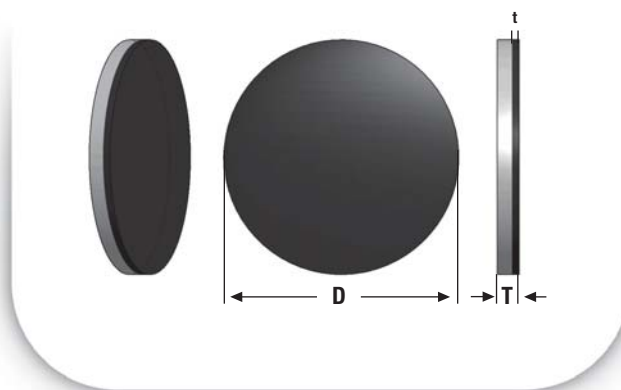
EN For technical data, please refer to page 6.
 DE Die technischen Daten entnehmen Sie bitte der Seite 6.
 FR Pour les données techniques, veuillez voir au page 6.

- EN PCD - Polycrystalline diamond - PCD grades and their applications
 DE PKD - Polykristalliner Diamant - PKD-Sorten und ihre Anwendungen
 FR PCD - Diamant policristallin - Les nuances de PCD et leurs applications
 IT PCD - Diamante policristallino - I tipi di PCD e le loro applicazioni
 ES PCD - Diamante policristalino - Calidades de PCD y sus aplicaciones

EN Roughing DE Schruppen FR Dégrossissage IT Sgrossatura ES Desbaste	Semi-finishing Semi-finischen Semi-finissage Semifinitura Semi-acabado	Finishing Finischen Finissage Finitura Acabado	Super-finishing Superfinischen Super-finissage Superfinitura Super-acabado	AL <6% Si	AL 6-12% Si	AI >12% Si	CFRP GFRP	Wood-based boards Platten auf Holzbasis Panneaux sur base de bois Pannelli a base di legno Tableros de madera-base	Comment Kommentar Commentaire Commento Comentario
○	✓	✓	✓	✓	✓	○	■	○	EN Best surface quality DE Beste Oberflächenqualität FR La meilleure qualité de surface IT Migliore qualità della superficie ES Mejor calidad de superficie
○	✓	✓	✓	✓	○	■	■	○	EN Universal use, small grain DE Universeller Einsatz, kleines Korn FR Utilisation universelle, petit grain IT Uso universale, grano piccolo ES Uso universal, grano pequeño
○	✓	✓	✓	✓	○	■	■	■	EN Best for low % Si-AL DE Am besten für geringen % Si-AL FR Le mieux pour un faible % Si-AL IT Migliore per basso contenuto di Si-AL ES Mejor para bajo % Si-AL
✓	✓	✓	○	✓	✓	○	○	✓	EN Universal use, medium grain DE Universeller Einsatz, mittl. Korn FR Utilisation universelle, grain moyen IT Uso universale, grano medio ES Uso universal, grano medio
✓	✓	✓	○	✓	✓	○	○	■	EN Best for medium % Si-AL DE Am besten für mittleren % Si-AL FR Le mieux pour un moyen % Si-AL IT Migliore per medio contenuto di Si-AL ES Mejor para medio % Si-AL
✓	✓	✓	○	✓	✓	✓	✓	✓	EN MDF, laminate DE MDF, Laminat FR MDF, stratifié IT MDF, laminato ES MDF, laminado
✓	✓	○	■	○	✓	✓	✓	✓	EN Universal use, coarse grain DE Universeller Einsatz, grobes Korn FR Utilisation universelle, gros grain IT Uso universale, grano grosso ES Uso universal, grano grueso
✓	✓	○	■	○	✓	✓	✓	○	EN Best for high % Si-AL DE Am besten für hohen % Si-AL FR Le mieux pour une grande % Si-AL IT Migliore per alto contenuto di Si-AL ES Mejor para alta % Si-AL
✓	✓	○	■	○	✓	✓	✓	✓	EN Best for CFRP DE Bestens für CFK FR Le mieux pour CFRP IT Migliore per CFRP ES Lo mejor para CFRP

- ✓ best performance
 ✓✓ very good performance
 ○ acceptable
 ■ not suitable

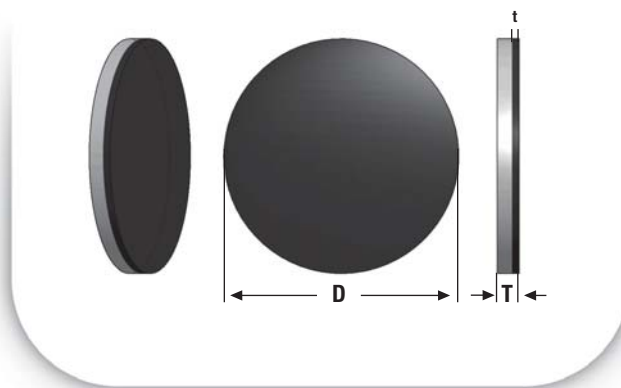
IT Per i dati tecnici, fare riferimento alla pagina 6.
 ES Para los datos técnicos, consulte la página 6.



EN Standard PCD blanks
 DE Standard-PKD-Ronden
 FR Rondelles PCD standards
 IT Dischi standard in PCD
 ES Rodajas PCD estándar

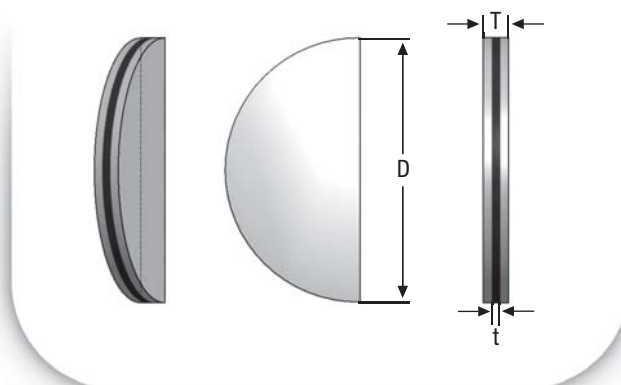
EN Grade DE Sorte FR Nuance IT Tipo ES Calidad	Properties and dimensions (mm)					Standard	Art.No.	Mesh	Art.No.
Grain size μm	Binder	D mm	T mm	t mm					
ES	Finest 0.5-0.8	Standard	52.0	1.6	0.6	360R52.0/1.6-ES	130967	360R52.0/1.6-ES-M	130968
				2.0	0.6	360R52.0/2.0-ES	130969	360R52.0/2.0-ES-M	130970
				3.2	0.6	360R52.0/3.2-ES	130971	360R52.0/3.2-ES-M	130972
				4.8	0.6	360R52.0/4.8-ES	131261	360R52.0/4.8-ES-M	130976
FS	Fine 2-4	Standard	52.0	1.6	0.6	360R52.0/1.6-FS	116375	360R52.0/1.6-FS-M	130973
				2.0	0.6	360R52.0/2.0-FS	116382	360R52.0/2.0-FS-M	130974
				3.2	0.6	360R52.0/3.2-FS	116389	360R52.0/3.2-FS-M	130975
				4.8	0.6	360R52.0/4.8-FS	116342	360R52.0/4.8-FS-M	130977
FX	Fine 2-4	Special	52.0	1.6	0.6	360R52.0/1.6-FX	112617	360R52.0/1.6-FX-M	130978
				2.0	0.6	360R52.0/2.0-FX	112620	360R52.0/2.0-FX-M	130979
				3.2	0.6	360R52.0/3.2-FX	112623	360R52.0/3.2-FX-M	130980
				4.8	0.6	360R52.0/4.8-FX	112626	360R52.0/4.8-FX-M	130981
MS	Medium 8-10	Standard	52.0	1.6	0.6	360R52.0/1.6-MS	116376	360R52.0/1.6-MS-M	129484
				2.0	0.6	360R52.0/2.0-MS	116383	360R52.0/2.0-MS-M	130679
				3.2	0.6	360R52.0/3.2-MS	116390	360R52.0/3.2-MS-M	130680
				4.8	0.6	360R52.0/4.8-MS	116343	360R52.0/4.8-MS-M	130982
MX	Medium 8-10	Special	52.0	1.6	0.6	360R52.0/1.6-MX	112618	360R52.0/1.6-MX-M	130983
				2.0	0.6	360R52.0/2.0-MX	112621	360R52.0/2.0-MX-M	130984
				3.2	0.6	360R52.0/3.2-MX	112624	360R52.0/3.2-MX-M	130985
				4.8	0.6	360R52.0/4.8-MX	112627	360R52.0/4.8-MX-M	130986
MU	Medium 2-4 + 8-10	Ultrahard	52.0	1.6	0.6	360R52.0/1.6-MU	116379	360R52.0/1.6-MU-M	130987
				2.0	0.6	360R52.0/2.0-MU	116386	360R52.0/2.0-MU-M	130988
				3.2	0.6	360R52.0/3.2-MU	116387	360R52.0/3.2-MU-M	130989
				4.8	0.6	360R52.0/4.8-MU	116346	360R52.0/4.8-MU-M	130990
CS	Coarse 20-35	Standard	52.0	1.6	0.6	360R52.0/1.6-CS	116377	360R52.0/1.6-CS-M	130991
				2.0	0.6	360R52.0/2.0-CS	116384	360R52.0/2.0-CS-M	130992
				3.2	0.6	360R52.0/3.2-CS	116391	360R52.0/3.2-CS-M	130993
				4.8	0.6	360R52.0/4.8-CS	116394	360R52.0/4.8-CS-M	130994
CX	Coarse 20-35	Special	52.0	1.6	0.6	360R52.0/1.6-CX	112619	360R52.0/1.6-CX-M	130995
				2.0	0.6	360R52.0/2.0-CX	112622	360R52.0/2.0-CX-M	130996
				3.2	0.6	360R52.0/3.2-CX	112625	360R52.0/3.2-CX-M	130997
				4.8	0.6	360R52.0/4.8-CX	112628	360R52.0/4.8-CX-M	130998
CU	Coarse 2-4 + 20-35	Ultrahard	52.0	1.6	0.6	360R52.0/1.6-CU	116380	360R52.0/1.6-CU-M	130523
				2.0	0.6	360R52.0/2.0-CU	116381	360R52.0/2.0-CU-M	130999
				3.2	0.6	360R52.0/3.2-CU	116388	360R52.0/3.2-CU-M	131000
				4.8	0.6	360R52.0/4.8-CU	116347	360R52.0/4.8-CU-M	131001

- EN Special PCD blanks
 DE Spezial-PKD-Ronden
 FR Rondelles PCD spéciales
 IT Dischi speciali in PCD
 ES Rodajas PCD especiales



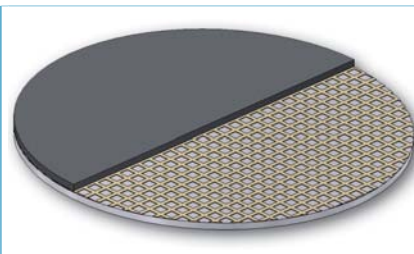
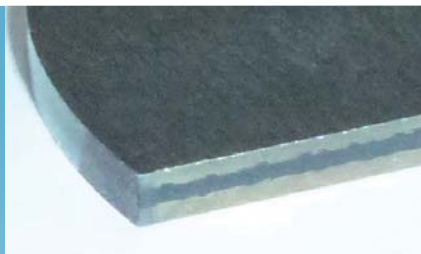
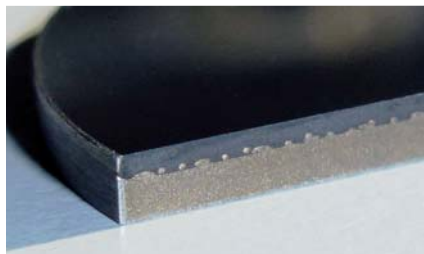
EN Grade DE Sorte FR Nuance IT Tipo ES Calidad	Properties and dimensions (mm)						Standard	Art.No.
	Grain size		Binder	D mm	T mm	t mm		
	μm							
FS	Fine	2-4	Standard	52.0	1.0	0.3	360R52.0/t=0.3/1.0-FS	122505
					1.2	0.3	360R52.0/t=0.3/1.2-FS	122510
					1.6	0.3	360R52.0/t=0.3/1.6-FS	122507
MS	Medium	8-10	Standard	52.0	1.0	0.3	360R52.0/t=0.3/1.0-MS	122180
					1.2	0.3	360R52.0/t=0.3/1.2-MS	122511
					1.6	0.3	360R52.0/t=0.3/1.6-MS	122181
CS	Coarse	20-35	Standard	52.0	1.0	0.3	360R52.0/t=0.3/1.0-CS	122506
					1.2	0.3	360R52.0/t=0.3/1.2-CS	131270
					1.6	0.3	360R52.0/t=0.3/1.6-CS	131271

- EN Sandwich PCD - half blanks
 DE Sandwich-PKD - Halbbronden
 FR Demies rondelles sandwich PCD
 IT Mezzidischi in Sandwich PCD
 ES Semirrodajas PCD en sandwich



EN Grade DE Sorte FR Nuance IT Tipo ES Calidad	Properties and dimensions (mm)						Mesh	Art.No.
	Grain size µm	Binder	D mm	T mm	t mm			
FX	Fine	2-4	Special	48.0	1.5	0.5	180R48.0/SW/t=0.5/1.5-FX-M	130824
					2.0	0.8	180R48.0/SW/t=0.8/2.0-FX-M	130825
MX	Medium	8-10	Special	48.0	1.5	0.5	180R48.0/SW/t=0.5/1.5-MX-M	130772
					2.0	0.8	180R48.0/SW/t=0.8/2.0-MX-M	130774
CX	Coarse	20-35	Special	48.0	1.5	0.5	180R48.0/SW/t=0.5/1.5-CX-M	130771
					2.0	0.8	180R48.0/SW/t=0.8/2.0-CX-M	130773
MS	Medium	8-10	Standard	48.0	1.5	0.5	180R48.0/SW/t=0.5/1.5-MS-M	131595
					2.0	0.8	180R48.0/SW/t=0.8/2.0-MS-M	131582
MU	Medium	2-4 + 8-10	Ultrahard	48.0	1.5	0.5	180R48.0/SW/t=0.5/1.5-MU-M	131596
					2.0	0.8	180R48.0/SW/t=0.8/2.0-MU-M	131583

EN Mesh diamond
DE Mesh Diamant
FR Mesh diamant
IT Mesh diamante
ES Mesh diamante



EN Standard mesh type PCD disc
DE Standard Mesh PKD-Ronde
FR Rondelles standard de Mesh PCD
IT Dischi standard di Mesh-PCD
ES Rodajas standard de Mesh PCD

EN Sandwich mesh type PCD disc
DE Sandwich Mesh PKD-Ronde
FR Rondelles sandwich de Mesh PCD
IT Dischi sandwich di Mesh-PCD
ES Rodajas sandwich de Mesh PCD

EN Principal concept of mesh type PCD
DE Prinzipielle Darstellung von Mesh PKD
FR Concept principal du type de Mesh PCD
IT Rappresentazione del principio di Mesh-PCD
ES Concepto principal del tipo de Mesh PCD

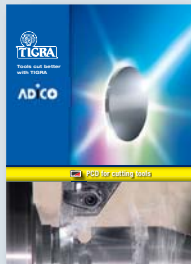
EN A metallic mesh between the diamond and the carbide layer improves the overall performance of our PCD products.
- higher impact resistance - less stress in the diamond
- stronger bond between diamond and carbide - less chipping
Mesh PCD is used in our sandwich PCD grades and also available in standard PCD.

DE Eine metallische Gitterschicht zwischen Diamant- und Hartmetallschicht verbessert die Gesamtleistung unserer PKD-Produkte.
- Höhere Schlagzähigkeit - Geringere Spannung im Diamant
- Stärkere Bindung zwischen Diamant und Hartmetall - Weniger Ausbrüche
Mesh PKD wird für unsere Sandwich PKD-Sorten eingesetzt und ist auch für Standard-PKD verfügbar.

FR Un maille métallique entre la base de diamant et de carbure améliore la performance globale de nos produits de PCD.
- Résistance aux chocs supérieurs - Moins de stress dans le diamant
- Lien plus fort entre le diamant et le carbure - Moins d'écaillage
Mesh PCD est utilisé dans nos classes sandwich PCD et également disponible en PCD standard.

IT Una maglia metallica tra lo strato di diamante e lo strato di metallo duro migliora le prestazioni dei nostri prodotti PCD.
- Migliore resistenza agli urti - Meno tensione nel diamante
- Forte legame tra il diamante e il metallo duro - Meno scheggiatura
Mesh-PCD viene usato per il PCD Sandwich ed è disponibile anche per il PCD standard.

ES Una malla metálica entre la capa de diamante y la capa HM mejora el rendimiento general de nuestros productos PCD.
- Resistencia al impacto superior - Menos tensión en el diamante
- Unión más fuerte entre el diamante y el HM - Menos astillado
Mesh PCD se utiliza en los grados de PCD sándwich y también disponible en PCD estándar.

	EN Further information DE Weitere Informationen FR Plus d'informations	IT Ulteriori informazioni ES Más información
New! 	EN For detailed technical information, please download from our homepage www.tigra.de or ask for a printed copy of our technical guidebook "PCD for cutting tools".	
	DE Detaillierte technische Informationen finden Sie auf unserer Homepage www.tigra.de zum download oder fordern Sie ein gedrucktes Exemplar unseres technischen Ratgebers "PKD für Schneidwerkzeuge" an.	
	FR Pour des informations techniques détaillées, s'il vous plaît télécharger à partir de notre page d'accueil www.tigra.de ou demander une copie imprimée de notre guide technique "PCD pour les outils de coupe".	
	IT Per informazioni tecniche dettagliate, si prega di scaricare dal nostro sito www.tigra.de o chiedere una copia stampata della nostra guida tecnica "PCD per utensili da taglio".	
	ES Para obtener información técnica detallada, por favor descargue de nuestra página principal www.tigra.de o solicitar una copia impresa de nuestro guía técnica "PCD para herramientas de corte".	



- EN Cutting service
- DE Schneiddienst
- FR Service de coupe
- IT Servizio di taglio
- ES Servicio de corte

EN TIGRA offers you a quick service for laser-cut PCD: according to your drawing, we cut within 3 working days, with and without angle. The segments are delivered cleaned and packaged safely. Thanks to the efficient production planning and processing, our laser-cut segments are in many cases significantly less expensive than whatever is possible by wire cutting!

DE TIGRA bietet Ihnen einen Schnellservice für Laser geschnittenes PKD: nach Ihrer Zeichnung trennen wir innerhalb von 3 Arbeitstagen, mit und ohne Winkel. Die Segmente werden gereinigt und sicher verpackt ausgeliefert. Dank der effizienten Arbeitsvorbereitung und Bearbeitung sind unsere Laser geschnittenen Segmente in vielen Fällen deutlich günstiger als dies mit Drahtschneiden möglich ist!

FR TIGRA vous offre un service express pour PCD découpé au laser. Nous découpons avec ou sans angle et suivant votre dessin dans un délai de 3 jours ouvrables. Les segments sont nettoyés et livrés solidement emballés. Nos segments découpés au laser sont dans de nombreux cas nettement plus avantageux que par découpe par fil grâce à la préparation du travail et à l'usinage efficaces!

IT TIGRA vi offre un servizio rapido per PCD tagliato a laser: in base ai vostri disegni, eseguiamo i tagli entro 3 giorni lavorativi, con e senza angoli. I segmenti vengono puliti e spediti in imballi sicuri. Grazie all'efficienza di preparazione e lavorazione, i nostri segmenti tagliati a laser sono spesso più economici di quelli ottenuti con una macchina ad elettroerosione!

ES TIGRA ofrece un servicio rápido de corte por láser para calidades PCD: en un plazo de 3 días realizamos trabajos a medida, con o sin ángulo, conforme a su diseño. Los segmentos se entregan en embalaje seguro y limpios. Gracias a una eficiente preparación del trabajo y un óptimo mecanizado nuestros segmentos cortados por láser son en muchos casos sustancialmente más económicos que los de corte por alambre.

EN Warning
DE Warnung
FR Mise en garde
IT Avvertenza
ES Advertencia

EN This catalogue describes cemented carbide products. Grinding of these products will produce dust of potentially hazardous ingredients. Dust from grinding the products described in this catalogue can cause nose, throat, skin and eye irritation and temporary or permanent respiratory disease in a small percentage of exposed individuals. Permanent respiratory disease can lead to disability or death. Coolant mist from wet grinding may contain dust. Avoid prolonged skin contact with dust or mist. Use adequate ventilation when grinding. Maintain dust levels below OSHA and ACGIH levels. Use protective devices. Wash hand thoroughly after handling, before eating or smoking. Dispose of materials according to local, state and/or federal regulations.

DE Der Schleifstaub der in diesem Katalog beschriebenen Hartmetallprodukte enthält möglicherweise gesundheitsschädliche Bestandteile. Er kann Nasen-, Atmungs-, Haut- und Augenreizungen auslösen. Dauerhaftes Einatmen kann zu ernsthaften gesundheitlichen Schäden führen. Beim Schleifen mit Kühlung entsteht ein Schlamm, der diesen Staub ebenfalls enthält. Vermeiden Sie das Einatmen von Schleifstaub und Schleifschlamm sowie längeren Hautkontakt. Sorgen Sie für ausreichende Absaugung. Benutzen Sie Schutzvorrichtungen. Waschen Sie sich nach der Berührung sorgfältig die Hände, insbesondere vor dem Essen. Die Entsorgung von Rückständen muss nach den entsprechenden gesetzlichen Vorschriften erfolgen.

FR La poussière de meulage des produits en carbure décrits dans ce catalogue risque de contenir des éléments dangereux pour la santé. Elle peut provoquer des irritations du nez, des voies respiratoires, de la peau et des yeux. Une inhalation prolongée peut provoquer de graves problèmes de santé. Pendant le meulage avec refroidissement, il se forme du cambouis qui contient également cette poussière. Évitez d'inhaler la poussière et le cambouis de meulage, ainsi que tout contact prolongé avec la peau. Veillez à ce que leur aspiration soit suffisante. Utilisez des dispositifs de protection. Après tout contact, lavez-vous soigneusement les mains, surtout avant les repas. La mise au rebut des résidus doit se faire conformément aux prescriptions légales en vigueur.

IT Il pulviscolo di rettifica del prodotto in metallo duro descritto nel presente catalogo può contenere componenti dannosi per la salute. Può causare irritazione a naso, vie respiratorie, pelle e occhi. L'esposizione prolungata a queste sostanze e la conseguente inalazione possono causare seri danni alla salute. Anche in caso di profilatura a freddo si produce un residuo fangoso che contiene questo pulviscolo. Evitare l'inalazione e il contatto prolungato con la pelle del pulviscolo di rettifica e dei residui. Eseguire un'accurata pulizia e adottare idonee misure di protezione. Lavare accuratamente le mani dopo ogni contatto, soprattutto prima dei pasti. Smaltire i residui in conformità alle normative vigenti in materia.

ES En este catálogo se describen productos de metal duro que, durante el lijado, producen un polvo que contiene sustancias nocivas para la salud. Estas sustancias pueden provocar irritación en los ojos, la piel o la nariz y causar problemas respiratorios. Una exposición continuada puede conducir a lesiones físicas graves. Durante el lijado con refrigeración, se produce una pasta que también contiene este polvo. Evite respirar el polvo y la pasta de lijado, así como el contacto prolongado con la piel. Asegúrese de utilizar un sistema de aspiración adecuado. Utilice dispositivos de seguridad. Láve las manos minuciosamente después del contacto, en particular antes de comer. Observe las prescripciones legales correspondientes para la gestión de residuos.

- EN Terms and conditions
- DE Allgemeine Geschäftsbedingungen
- FR Conditions générales de vente
- IT Condizioni generali di vendita
- ES Condiciones comerciales generales

EN	You can find our current Terms and Conditions on our homepage www.tigra.de . If you choose terms and conditions in the navigation menu you can read, save or print the document.
DE	Unsere Allgemeinen Geschäftsbedingungen finden Sie stets aktuell auf unserer TIGRA-Homepage unter www.tigra.de . Bitte wählen Sie AGB im Navigationsmenü und das Dokument steht Ihnen zum Nachlesen, Abspeichern oder als Ausdruck zur Verfügung.
FR	Vous trouverez toujours nos conditions générales de vente CGV actualisées sur notre page d'accueil TIGRA sous www.tigra.de . Veuillez choisir ces CGV ("Terms and conditions") sur le menu de navigation, et vous pourrez lire, sauvegarder ou imprimer ce document.
IT	Le condizioni generali di vendita da noi attualmente applicate sono disponibili sul nostro sito TIGRA all'indirizzo www.tigra.de . Il documento può essere letto, salvato o stampato selezionando la voce ("Terms and conditions") nel menu di navigazione.
ES	Encontrará nuestras condiciones comerciales generales siempre actualizadas en nuestro sitio web TIGRA www.tigra.de . Seleccione CGV ("Terms and conditions") en el menú de navegación y accederá a un documento que podrá leer, guardar e imprimir.

- EN Safety information for our customers
- DE Sicherheitsinformationen für unsere Kunden
- FR Information de sécurité pour nos clients
- IT Informazioni di sicurezza per i nostri clienti
- ES Información de seguridad para nuestros clientes

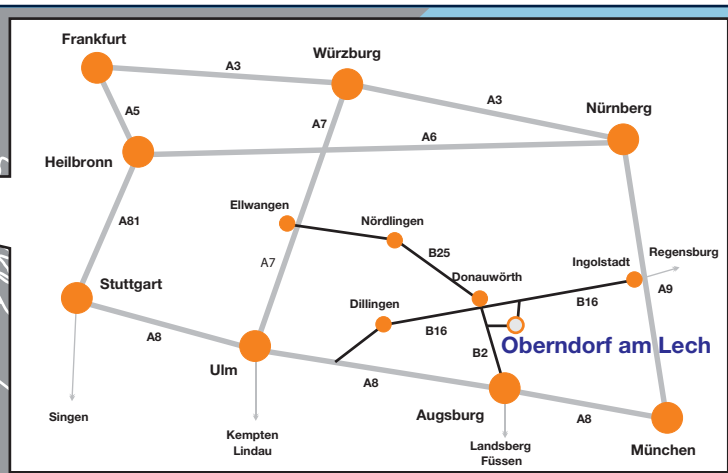
EN	www.tigra.de Please choose „Safety“ in the navigation menu and you will get the safety information for the production and application of tungsten carbide tools for woodworking.
DE	www.tigra.de Unter „Sicherheit“ in der Navigation erhalten Sie die Sicherheitsinformationen für die Herstellung und Anwendung von Hartmetallwerkzeugen für die Holzbearbeitung.
FR	www.tigra.de Sous „Safety“ vous trouvez des informations de sécurité pour la production et application des outils pour le travail du bois.
IT	www.tigra.de Scegliete termini e condizioni di vendita („Safety“), ivi trovate anche informazioni di sicurezza sulla produzione ed applicazione di utensili per il legno.
ES	www.tigra.de Por favor seleccione términos y condiciones („Safety“) en el menú de navegación. La encontrará la última información relativa a la seguridad con el trabajo del metal duro, resistencia a la flexión y afiladura.

[illegible]

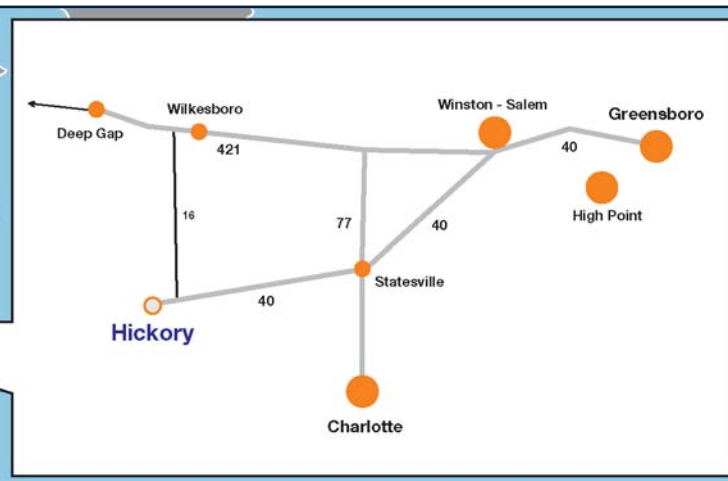
[illegible]

[illegible]

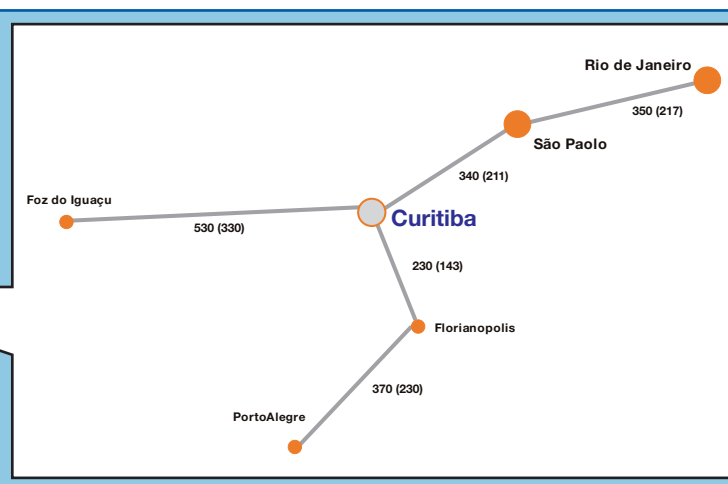
Oberndorf a. Lech GERMANY



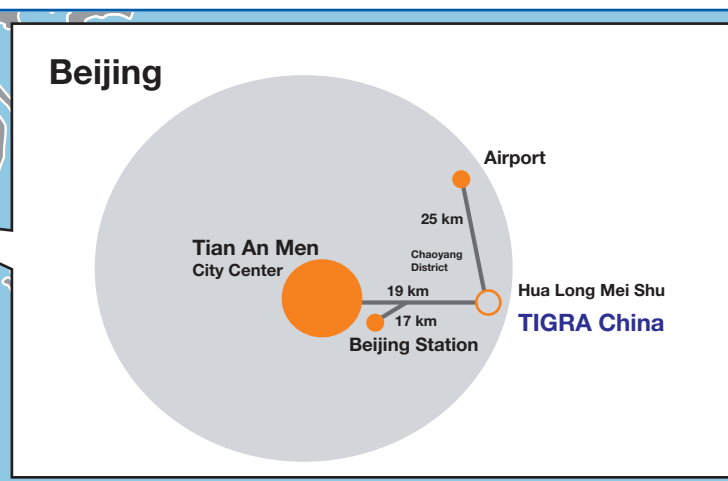
Hickory, NC USA



Curitiba-Paraná BRASIL



Beijing CHINA





TOOLS CUT BETTER WITH TIGRA

www.tigra.de

TIGRA GmbH

Gewerbering 2

D-86698 Oberndorf am Lech · Germany

Phone +49 (0)9090 9680-01 · Fax +49 (0)9090 9680-50

www.tigra.de · sales@tigra.de



TIGRA USA, Inc.

1106 8th ST CT SE

Hickory, NC 28602 · USA

Phone +1 828-324-8227 · Fax +1 828-324-8097

www.tigra-usa.com · sales@tigra-usa.com



TIGRA do Brasil Ltda.

Rua das Carmelitas 586 · Hauer

81610-070 Curitiba-Paraná · Brazil

Phone +55 41 3276 3731 · Fax +55 41 3377 3075

www.tigrado brasil.com.br · tigra@tigrado brasil.com.br



TIGRA China Co. Ltd.

1-1-101 Hua Long Mei Shu · No.15 Jian Guo Road

ChaoYang District · Beijing, 100024 · P.R. China

Phone +86 10 5921 4353 · Fax +86 10 5921 4352

www.tigra-china.com · sales@tigra-china.com

